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THE TROOPER'S DITTY.

BY THE "POET LARIAT."

We're the pilgrims, we're the pilots, the trusty advance guard,
We blazed the way from coast to coast by fighting, riding hard;
And we roughed it on the Border till the Border ceased to be,
Then they shipped us to the Philippines to mix in the melee.

CHORUS:

Then fill up the tin cup, clear up to the rim,
A stiff stirrup-cup as of yore,
And drink with a zest to the fellows the best,
The men of the old Yellow Corps.

We criss-crossed Arizona with our bloody, tortuous trails;
We showed the fierce Apaches that we weren't the kind that fails;
We fought the red Kiowas and Comanches to a still,
And the Sioux and Cheyennes from us took many a deadly pill.

We have parched upon the "Staked Plains" where water was unknown;
We have tramped across the "Bad Lands," for grub—horse meat alone;
We've slept on sheets of alkali in river beds gone dry,
And forded all the treach'ous streams beneath the Western sky.

We rid the precious prairies of their sons whom were our game;
We guarded trains across the plains before the U. P. came;
We modernized the "woolly West" and left it safe and fair,
And kiddies now trot off to school where Red Cloud lifted hair.

THE TROOPER'S DITTY.

We're familiar with her cañons, her mesas and her peaks,
Her "sakys" and her "wallows"—where we've wallowed many weeks;
And we knew the Cacti family, which gave us numerous points,
And now our only clubrooms are the low-down, deadly "joints."

*For they took our sutlers from us, likewise our traders, too,
Then orders merciless and harsh made our canteens "skidoo."
Why not desert? We're not that kind; we still lead into line;
WE STICK! esprit de corps, you know; perhaps for auld lang syne.*

CHORUS:

Then fill up the tin cup, clear up to the rim, etc.

EDWARD L. KEYES,
Late Lieutenant Fifth U. S. Cavalry.

WANTED: A SYSTEM FOR FURNISHING REMOUNTS FOR THE CAVALRY.

BY CAPTAIN JOHN W. FURLONG, SIXTH CAVALRY, (GENERAL STAFF).

IN publishing this article the only desire in mind has been to interest cavalry officers in a subject which is felt to be timely and necessary for further progress in the cavalry service.

All intention to offend individuals or departments is disclaimed, and only cordial coöperation is sought to the end that the cavalry may obtain what it wants and needs in the most economical way.

Lack of expert knowledge is confessed, and no opportunity having been afforded to see the inner working of foreign remount systems, many conclusions have been deduced from books, reports and conversations with older officers, and are therefore possibly faulty, but it is hoped that publication may induce cavalrymen of wider experience to take up this important subject, and that the article may thus serve in a modest way as a basis for the formulation of a wise, efficient and economical system. The term economical is used advisedly, as it is believed that the cavalry arm of the service should by every means in its power avoid the charge of being costly or extravagant.

As a preliminary it may be stated that it is not deemed advisable to consider any project which involves supervision or direction of breeding by the government, as it is believed that much may be obtained by the simple laws of demand.

The subject will be taken up in the following order:

- (a) Desirability of proper organization in peace and war.
- (b) Type of horse required.
- (c) Method of purchase and issue.

(a) DESIRABILITY OF PROPER ORGANIZATION IN PEACE
AND WAR.

As under the present law the Quartermaster's Department is charged with the purchase and issue of remounts, it seems proper that the entire system and care of the horses up to the time of issue should be vested in that department.

The establishment of a division in the Quartermaster General's office to be known as a Remount Bureau is therefore suggested.

To promote system and efficiency such a branch would be an absolute necessity in time of war. Great numbers of animals must then be purchased, and as they cannot be sent direct to troops in the field, remount depots must be established at convenient points, to which the animals can be sent and cared for preparatory to issue.

These depots are further rendered necessities, in that such establishments and sub-depots must be maintained for the purpose of taking care of animals run down in campaign, but which gives promise of further service after recuperation.

In view of the fact that these possibilities exist, it would be wise to have all necessary data on hand in order that work can be systematically commenced at any time. This data would include a list of officers who have shown themselves to be good horse buyers, places where the desired class of animals can be secured in proper quantities and from whom plans for buildings required at remount depots, and estimates of materials, organization of personnel and scheme of administration of remount depots, and a list of officers competent to take charge of such establishment.

The proper time to formulate these plans is during the continuance of peace.

Excluding animals required for transportation and riding horses, the army needs at present 15,150 horses.

The life of cavalry and artillery horses from 1880 to 1895 was approximately between six and seven years.

It is impossible to fix the life at present existing, owing to conditions of service and the absorption of excess horses.

Two potent factors in the short life of these horses are the lack of a systematic course of equitation for recruits and a compulsory course of training for remounts.

The winter is the time for preparation for work in the open and the best time for the training of remounts. To this end, riding halls should be provided at all northern posts where cavalry and field artillery are stationed.

These questions should be taken up and definitely decided.

If properly solved, and a proper system of purchase of animals is adopted, there is no reason why the life of the horse should not be raised to ten years. This would require the annual purchase of 1,515 horses, which, together with the purchase of draft and pack animals, and the collection of the data noted heretofore, should be sufficient work to require the supervision of one officer and justify the establishment of a Remount Bureau in time of peace.

(b) TYPE OF HORSE REQUIRED.

All of our experience in the past points to the fact that for the cavalry and artillery service we want at least a fairly well bred gelding.

This horse must have the additional qualities of soundness, hardiness and quickness, and, in general, must have the necessary strength of bone and sinew, fair proportions, steady gaits, normal mouth, good health, good intelligence, and good blood.

It is not necessary that the horse should be thoroughly trained before issue to the troops. For obvious reasons it is preferable that they should do the breaking and training themselves.

In time of war, as much breaking and training should be done before issue as circumstances will permit. However, in any case the horse should be gentle, and should not have been spoiled in disposition, or otherwise, by any previous work. This can be determined by inspection.

The present specifications issued by the Quartermaster's Department are entirely satisfactory and cover all the good

points in a cavalry or artillery remount, except that some artillery officers contend that no great variation is required at present between lead, swing and wheel horses.

All that is necessary is to make sure, by inspection and method of purchase, of getting an animal that closely approaches the type described.

(c) METHOD OF PURCHASE AND ISSUE.

For many years there has been constant complaint of the class of remounts furnished.

The system of purchasing horses under contract is a vicious one. The government has always paid more than it should for the type of horse obtained, and, in addition, it has accumulated many worthless ones.

The people who take the contracts are, as a rule, professional government contractors. For any one else the specifications, requirements, bonds, etc., are prohibitive.

The contractor has to make a big outlay of money, and it is usually borrowed from a bank at interest. At the very outset, therefore, the fact that this interest will, of course, be defrayed by the government lowers the type of horse that will be obtained.

In addition, the contractor is required to pay certain expenses incident to inspection, as follows: Furnishing strong hemp halters for horses purchased; weighing horses; removing and placing shoes and furnishing new shoes when required; sacking tails and preparing horses for shipment; loading horses on board cars; cost and risk incident to branding horses; and other incidental expenses for labor and material in fulfillment of contract.

The contractor also expects to make as big a percentage of profit as he possibly can.

From the very first a conflict is precipitated between the inspecting officer and the contractor. The interests of the two are diametrically opposed. The contractor tries to furnish the cheapest grade of horse possible, and the inspecting officer tries to get the best possible type of horse.

The contractor usually proceeds as follows:

During the first week or so he presents different kinds of the cheapest horses that he thinks may possibly be accepted, until several are accepted. This proceeding is for the purpose of sizing up the inspector; that is, finding out what his idea of a cavalry or artillery horse is, and discovering the cheapest type of horse he will accept. This having been discovered, the inspector never has presented to him any but the cheapest type of horse, which it is believed by any possibility may pass inspection. If the inspector buys any, he is simply selecting those which are nearest to what he desires, knowing all the time that they are "squeezers" and not up in quality to what he ought to buy. Should the inspector be experienced, and during this time reject all horses presented to him, for the reason that in his opinion they are not suitable for the service, the contractor begins correspondence objecting to the inspection on the ground that the kind of horses required by the inspector cannot be obtained and that he wants a better horse than was contemplated by the contract.

If this proceeding be ineffective he invokes political influence.

All this results in delay, expense, and usually, in the end, the acceptance of an inferior grade of horse.

It must be recognized that no matter how well drilled cavalry soldiers are, if their horses are of inferior quality they are correspondingly worthless for strictly cavalry work.

The claim is now made that suitable horses for cavalry service are scarce. This is doubtful. There is probably a smaller percentage of such horses than there were twenty-five or thirty years ago, when, unquestionably, there were plenty of them. However, according to all testimony, the contractor in those days proceeded in the same way and made the same claims that they do now, and did not try to furnish the type of horses desired so long as they could succeed in having lower priced and less desirable horses accepted by any of the methods above mentioned.

The purchase of horses by contract differs from all other purchases by contract, in that there can be no definite fixed

type or standard to go by. To a good buyer each individual horse has a value of its own.

The average contract price of cavalry horses purchased for use in the United States, in the fiscal year ending June 30, 1905, was \$151.53. The interest on this amount at a fair rate would probably amount to \$4.50. Assuming that it takes the contractor three weeks to furnish a car-load of twenty horses, his expense would probably be as follows:

Purchase of twenty hemp halters	\$ 5 00
Weighing horses	2 00
Shoeing and branding horses	20 00
Sacking tails	5 00
Loading horses on cars	5 00
Incidental expenses	10 00
Wages of two assistants (\$3.00 per day).....	126 00
Total.....	\$173 00

or \$8.65 per horse.

An allowance of ten per cent profit to the contractor would be liberal, and would amount to, say, \$16.00 per horse.

As a matter of fact, the expenses are probably very much less and the profit more. However, assuming these figures for purposes of comparison, the interest, expense and profit would amount to \$29.15 per horse.

In a particular instance, it has been estimated that the expense to the government of inspection and purchase, *i. e.*, transportation of inspector and assistant, per diem expenses, and stabling and feeding of accepted horses, amounted to \$3.49 per horse, with the probability that the average for the whole number of horses purchased would be slightly less if it could be figured. Assume it as \$3.00. According to these figures the government should obtain a horse worth in open market \$122.38 at an expenditure of \$154.53.

It is not believed that the cavalry horses in the service to-day average up to this standard. Several plans have been proposed with a view to remedying matters.

One is to put a time limit clause in the contract, and provide therein that if the contractor should fail to complete his contract in the given time the necessary number of horses to complete it shall be purchased in open market, the extra cost,

if any, being charged to the contractor. This would simply result in an increased price, with, in all probability, no better results.

Another proposition is to divide the horses purchased into two classes:

1. Horses conforming to present specifications and intended and needed for immediate issue to troops, to be purchased under contract, said contract to contain a time limit clause.

2. Horses between three and four years old, to be purchased in open market and sent to a remount depot, kept until matured and gentled, halter-broken, etc., before issue to troops.

With reference to Class 1, the objections have already been stated.

Horses of Class 2 would, it is believed, in the end be very expensive products.

A careful and conservative estimate has been made of the initial cost of the colts, cost of establishing a depot, running expenses of same, cost of feed, etc., and it shows that the horse when ready for issue would have cost as follows:

Average cost of colt	\$100 00
Average cost of inspection, purchase, etc.....	8 93
Average cost of keeping for one year.....	73 29
Average cost of plant and wear and tear.....	14 34
	<hr/> \$196 56

This estimate does not take into account any excess cost of transportation, nor the probable percentage of colts which would not turn out well, and have to be sold.

The probable cost per horse would be well over \$200.00.

Although the remount depot system has the appearance of not being economical, it is believed that the following data should be presented for consideration:

For some time there has been agitation in Europe to make the remount depot serve a better purpose. This agitation has received the support of many civilian expert horsemen, who consider that the remount depot as at

present constituted is nothing more than an equine sheep fold.

Our specifications now provide that the minimum age of the remounts shall be four years.

The troop horse must have certain qualities, the principal of which are soundness and hardiness. It is not necessary that he shall be finely trained. What is required is, that he shall be trained to such an extent as to carry the soldier safely and for a long distance. In addition, his constitution must be such that he can stand the hardships incident to service in the field.

Horses which are intended for racing purposes are raised on grain practically from the time of their birth, and when they are from six to eight months old are getting about six pounds of oats a day. When eighteen months they are stabled, highly fed, and put in severe training. At the age of two years they take part in special races. A similar, but somewhat slower, method of procedure is taken in the case of trotting horses and those which are being raised for fashionable purposes. These horses do not usually begin work until three years old. It may be remarked that not all of those two classes of horses are thoroughbreds. Other horses which would make desirable remounts are rather neglected, and they are kept at grass, as this is the most economical method of raising. A horse grows fast, and his skeleton and muscular system are large. The development of this latter class of horses is not hastened by judicious feeding, and as a consequence his bones ossify slowly and his muscles do not stand out. The older he is allowed to grow under this system, the more debilitated does he become so far as his muscular system is concerned. When three years old we may say that he is backward, but, between four and five years of age he suffers from anæmia. Hence the older such horses gets, the longer the time and the more difficult the process to get him into good shape by proper food and exercise. If the horse is but three years old, a few months may be sufficient time. By the time he reaches five, a year or more may be required.

There is no reason to suppose, therefore, that a horse

three and one-half years old, which is judiciously fed and exercised, would not be in as good condition for work at four years as one which was purchased at five years would be at six.

As regards training, all authorities concede that the horse of three and one half years of age is more supple than an older horse, and has not yet contracted the habit of going on his shoulder, and hence can be more easily balanced. The most important part of training is to get the horse well balanced; that is, to carry his own weight, that of the pack and rider equally on both ends. Horses left too much to themselves, or which are improperly balanced, go on their shoulders, and the forehand works too much and he gets broken down in front. This is the principal cause of condemnation of a majority of horses at a time when they should be in their prime and have years of work left in them. If we take the young horse in hand to feed up and train at the same time, the first three months must be devoted entirely to developing a good balance, very little riding being done. At the end of this time, the breaking proper can be commenced, and by good, systematic handling the horse can be fairly well broken for cavalry purposes in three more months.

It is believed, however, that the only satisfactory and economical method is to purchase matured horses in the open market, pay a fair price, and pay by cash or check immediately upon acceptance of the horse, or conclusion of the service rendered.

The objections to the method of open market purchase have been stated to be as follows:

1. That horses of the class desired are scarce.
2. That raisers and breeders will not bring to designated points horses of the class desired in response to hand-bills or newspaper notices.
3. That the method of purchase is expensive, at least much more so than the present method of purchase.

It is not believed that the first objection is well founded. The same objection was made twenty-five or thirty years ago when it was well known that such horses were not scarce.

Certainly we do not get them under the contract system because contractors do not try to get them for reasons discussed heretofore. There is, therefore, practically no demand for them by the government at present, and this would tend to make them scarcer instead of bettering conditions. If there was a demand, and farmers and breeders knew they would get a fair price for their stock and cash payment at time of sale, they would produce the class of horse desired.

With reference to the second objection, the printed specifications scare the farmer or breeder. It would be well for the inspecting officer to have this type in mind, but the advertised specification should be in more general terms. Another reason why individuals are loath to bring their horses in is due to the fact that they do not like to deal with the government. They do not want to sign vouchers and then have to chase up or write continually to some individual to hurry up payment. They want to do business in the usual manner—get their money when they make the sale.

As conditions now exist, the farmer does not care to make sales to the government if he can make them anywhere else, even at a lower price.

With reference to the third objection: The average cost of a cavalry remount has been shown to be \$154.53. It is estimated that it would take three weeks to get a car-load of horses, purchasing in open market, and that the expense of inspection, purchase, etc., would be \$20.46 per horse. This estimate assumes that the buyer and assistant will have to travel about the country picking up individual horses. This deducted from the present cost of horses would leave \$134.07 to be paid for each horse in open market purchase. A comparison of the type which would probably be obtained for this amount in the open market, using the method described with the average type now obtained and represented by \$122 38, renders the conclusion obvious.

The present system of not buying horses until those they are to replace are condemned, should be changed, no matter what system is adopted.

It is a notice to people that the government has to have horses at once, and the only purpose it serves is to raise the

price. In case of open market purchase a change would also prevent the possibility of any one going ahead of the purchasing officer and getting options on desirable horses.

Estimates and purchases of remounts should be made on the basis of one-tenth of the authorized strength.

Organizations would then be able to cast in the fall the number of horses which it was possible to supply them with up to the maximum allowance.

It is believed that many horses are now in the service which should and would be put on inspection report if the commanding officer were not in doubt as to whether, under existing conditions, he would better himself.

If the necessary reforms are made as outlined, and a better grade of horses obtained by means of open market purchase, the life of a horse should be raised from six and a half to ten years.

A large saving would thus be made, which could be used to pay a higher price for horses to be used in the United States.

It is not believed wise, or in the interest of economy, to send high priced horses to the Philippines, on account of the danger of epidemics, but they should be purchased in open market.

There are at present required for service, within the limits of the United States, approximately 8,436 cavalry horses, and 3,239 artillery horses. The average cost is as follows: Cavalry remounts, \$154.91; artillery remounts, \$157.05.

With a life of six and one-half years there would be required annually, 1,298 cavalry remounts, cost \$201,073.18; 498 artillery remounts, cost \$78,210.90.

With the life raised to ten years there would be required annually 844 cavalry remounts, 324 artillery remounts.

If the same amount of money were available we could pay for remounts, including cost of inspection and purchase, cavalry, \$238.23; artillery, \$241.39.

Taking the estimate of the cost of inspection, purchase, etc., of each horse purchased in open market, viz: \$20.46,

the following amounts would be available to pay the farmer or breeder for remounts: Cavalry, \$217.77; artillery, \$220.93.

The following estimates of cost of inspection, purchase, etc., under the contract method of purchase and open market method of purchase are presented to make clear some of the figures heretofore used:

CONTRACT METHOD OF PURCHASE.

During three months (December 9, 1903, to March 7, 1904) there were inspected and purchased under the contract system 252 horses (cavalry, artillery and draft) and 419 mules, a total of 671 animals. These animals were delivered at the national stock yards, East St. Louis, Illinois, and Lathrop, Missouri, at which places the inspection and purchases were made.

The station of the inspecting officer and clerk, in this case, was at Washington; that of the veterinarian at St. Louis, Missouri.

Because of the small number of horses delivered at some of the inspections it is thought the cost of inspection of horses during this period is in excess of what it would be under ordinary circumstances for an entire fiscal year, and in view of the fact that on almost every inspection trip both horses and mules were inspected and purchased, the actual cost of inspection, purchase and shipment of the total number of animals only (671 horses and mules) can be stated, from which an approximate cost thereof for the horses and mules separately is determined.

If there be included in the cost of inspection and purchase of animals all expenses incurred on account of transportation and per diem allowances for the inspecting officer and his assistant from the time they leave their stations until they return thereto, and for care, stabling and feeding the animals purchased up to the time they are shipped to their destination, the cost of inspection, purchase and shipment under contract of the above mentioned animals, is found to be as follows:

	Account Transporta- tion	Account Per Diem Expense.	Account Stabling, Feeding, etc.	Total.
671 Animals	\$969 19	\$196 02	\$318 25	\$1,983 46
252 Horses	626 53	101 77	150 50	878 80
419 Mules	342 66	94 25	667 75	1,104 66
Average per animal	1 45	29	1 22	2 96
Average per horse	2 49	40	60	3 49
Average per mule	82	23	1 59	2 64

OPEN MARKET METHOD OF PURCHASE.

It is assumed that it will take three weeks to get a car load of twenty horses; that the inspection and purchase are made by a similar party, viz: inspecting officer, veterinarian and clerk, starting from the same stations as above, and keeping away from the general horse markets; and that all horses are to be purchased at first hand in the best horse sections throughout the country.

ESTIMATE.

Hire of wagon and driver, 10 days, at \$5.00 per day	\$ 50 00
Per diem expenses, veterinarian and clerk, 21 days	126 00
Stabling and feeding horses awaiting shipment	105 00
Assembling horses for shipment	25 00
Purchase of 20 hemp halters	5 00
Weighing horses	2 00
Shoeing and branding horses	20 00
Sacking tails	5 00
Loading horses on cars	5 00
Incidental expenses	25 00

For inspection, purchase and shipment of one car load \$368 00

At the same rate, cost of inspection, purchase and shipment of 252 horses (13 cars), would be	\$4,784 00
Transportation of inspector and assistant from station to first place where purchases are made	110 65
Transportation of inspector and assistants to other places where purchases are made	150 00
Transportation of inspector and assistants from last place where purchases are made to stations	110 65
Total estimate for inspection, purchase and shipment of 252 horses ..	\$5,155 30
Estimated average cost per head	\$ 20 46

Assuming the cost of inspection, purchase and shipment under contract to be \$3.00 per head instead of \$3.49, and add-

ing to it interest, expenses of contractor, and profit, \$29.15, we have \$32.15 per head, and the difference in favor of the open market purchase, according to the figures presented, is \$11.69 per head.

The next question is, when and how issue shall be made? The procedure in time of war has been discussed under sub-head (a).

In time of peace every energy is devoted to instruction. The best results are obtained when it is continuous and progressive in character.

In the days before the Spanish War reenlistments were numerous, and it was not necessary to devote so much time and attention to individual instruction as at present. Recruits arriving in small numbers could be easily assimilated, and every troop had a sufficient number of well instructed, good riders, who could take up at any time the training of remounts without material interference with instruction. However, conditions are now different, and the progressive scheme of instruction should not be interfered with by the necessity of training remounts. They should take the place of horses condemned at the end of the outdoor season of drill and be trained during the winter months. The purchase of horses is, however, comparatively slow work, and it would probably take all the spring, summer and fall to purchase the animals required at the end of the year. If they should all be sent to organizations at a stated time, the establishment of remount depots would be rendered necessary. This would be expensive. The following plan is believed reasonable:

Allow each organization to condemn annually, at the end of the outdoor season, one-tenth of its authorized mount as a maximum; and require each organization commander to report by July 1st just how many animals he intends to condemn inside this limit. It may be assumed as a fact that no troop commander will condemn a good horse.

Horses should then be purchased on this basis. One or two cheap frame stables should be constructed at each post to accommodate extra animals, and animals should be shipped to the post for which they are destined as soon as purchased.

They would then become acclimated and could be handled, to a certain extent, before the serious work of training was commenced.

No matter whether this plan is adopted or not, riding halls should be constructed at all posts where outdoor work cannot be carried on by mounted troops in the winter months.

With a three-year enlistment and few reenlistments it is essential that the mounted soldier should be riding every working day of the year, if efficiency is expected.

Under the present system of issue, remounts are not purchased until after the horses they are to replace have been condemned. The time of arrival is problematical and usually as necessity exists for their use; the time for outdoor instruction being limited, they are rushed into the ranks before being properly trained.

In addition to the above, there is no uniform and compulsory system for training remounts, and even under favorable auspices the kind and amount of training given depends upon the views or amount of knowledge of the individual organization commander.

In most cases the result is that the remount gets insufficient or improper training, and not being properly balanced, goes on his shoulders, breaks down in front, and is condemned after a comparatively short life.

Finally, the officer selected to purchase in open market should not only be a good judge of horses, but a good buyer. He should be permitted to pay a stated average price with a maximum and minimum limit, and in no case should any horse, no matter how desirable, be permitted to influence in any way the acceptance of any other or others, if any doubt exist as to the propriety of acceptance. This is a trick which horse sellers frequently practice.

It is believed that as a preliminary, a study by the officer detailed in charge of the remount bureau, and by the purchasing officers, of the manner of handling horses at the stock yards at East St. Louis, would be valuable, *i. e.*, following a dealer from the time he has purchased his bunch until he has finally disposed of them at the stock yards.

These men know every horse in their section of the country, and simply gather and pass along bunches of horses of from one to three car loads, and it is believed, from information gathered, that there is no large profit in their business.

THE IMPROVEMENT OF THE RIDING SADDLE.

FROM KRIEGSTECHSNISCHE-ZEITSCHRIFT.*

NINETEEN hundred years have passed since the first authentic use of the saddle for riding purposes. Its convenience and advantages quickly gained for it universal favor and assured its rapid development. The latter has from the beginning proceeded along two separate and distinct lines. These are shown to-day in what may be generally designated as (1) "platform" saddles and (2) "frame" or "saw-buck" saddles.

In the completed saddle, both forms seek to fulfill the requisite conditions of a base or groundwork consisting of two symmetrical parts, which, without pressing upon or touching the horse's backbone, lies parallel to it along the back and are held together by two arched binding pieces called the forks or trees.

By this arrangement is formed a concave or hollow seat, the long flat sides of which lie parallel to the backbone, and the short sides overspan but do not touch the vertebræ. In the earlier saddles the two systems, notwithstanding a great variety of detail, approach each other very closely in their essentials. In the later forms they differ widely.

In the platform system, the entire seat space between forks and side-bars, *i. e.*, the long pieces parallel to the backbone, is covered with a single piece of leather. The under surfaces of the side-bars are thickly padded and furnish all necessary support.

In the frame or saw-buck system, narrow supporting straps are tightly stretched between the front and rear forks. A padded seat cushion is placed upon the support so formed

*Translated by Captain W. D. Chitty, Fourth Cavalry, U. S. Army.

and a thick cloth several times folded (the saddle blanket) takes the place of the thick padding under the side-bars used in the platform system.

From the two systems may be noted the following examples: In the first class or platform system is (1) the German or school saddle, which is provided front and rear with padding from ten to twelve centimeters thick. This saddle, at one time used by the cuirassiers, is to-day found only in cer-

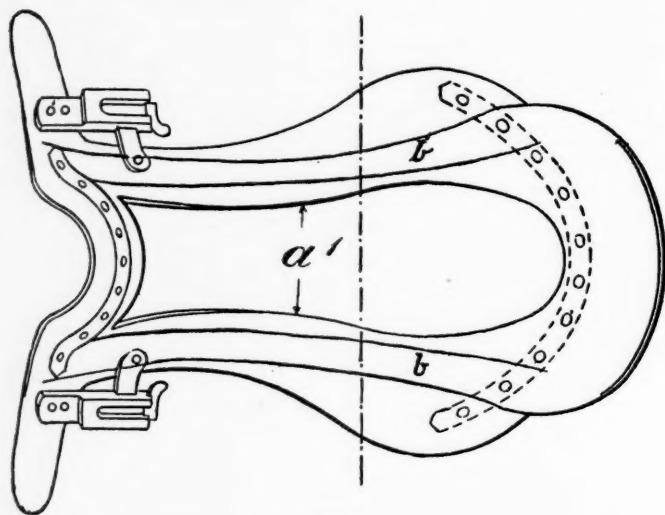


FIG. 1.

OLD SADDLE FROM ABOVE. *a'*. WOOD. *b*. LEATHER TREE WITH STEEL BAND.

tain riding schools. It affords a very firm seat, and is therefore especially favored for young riders and for the breaking of young horses. (2) The French saddle is padded in front only, and constitutes a compromise between the German and (3) the English saddle, the lightest, most durable and popular of its class. This saddle, distinctly a platform saddle, through its close and firm seat, gives the rider perfect sympathy with the motion of the horse, and consequent improved control. The true English saddle has a long smooth seat and is principally used as a racing saddle. The padding and raising of the rear portion of this saddle forms what may be

called the German-English saddle. This saddle is used generally by our mounted and riding officers.

The other system (frame or saw-buck saddles) is seen in (4) the Hungarian saddle, bearing high spoon-shaped forks from front and rear. A seat cushion is attached to these forks and rests upon thongs or straps stretched between the pommel and cantle. This saddle was used by all our mounted troops, the cuirassiers excepted, until the adoption of the present German army saddle.

The latter saddle was adopted for all the German cavalry in 1889, and was intended to combine the best features of the

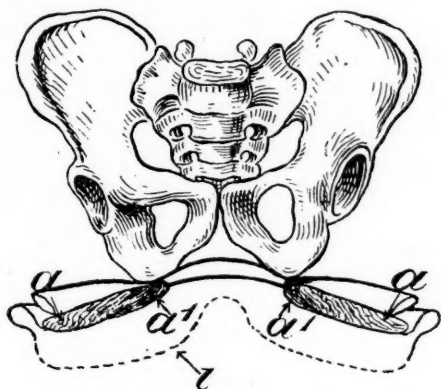


FIG. 2. CROSS-SECTION OF THE OLD SADDLE.

Hungarian and English saddles. Its frame is formed of two curved and hollowed-out sidebars similar to those of the English saddle. These are padded on the lower faces. The forks, likewise similar to the forks of the English saddle, are connected by a seat strap or thong, broad at the rear and narrowing toward the front, upon which the leather seat is fastened.

All these saddles, whatever name they bear, possess, as well as certain advantages, various defects which stand very much in need of elimination before an ideal saddle can be obtained.

Of the first importance is the requirement that the saddle shall function perfectly with the horse's back. Otherwise

painful pressure at the edges and ends will be developed. If the saddle does not fit, the influence of buttocks and thighs as an aid to control is defective if not altogether useless, and the rider's seat is a faulty one.

A riding saddle adjustable to the back of any horse (thus avoiding the necessity of keeping in the saddle room, as is done in our field artillery, several sizes for exceptional backs) is said to have been exhibited at the Brussels Exhibition in

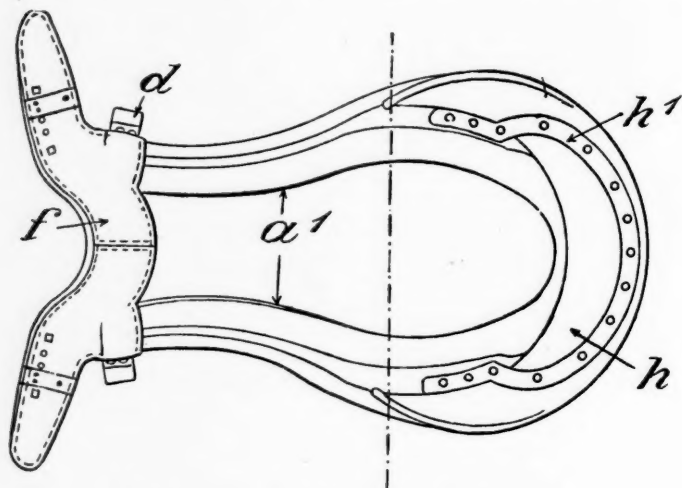


FIG. 3. SADDLE "GERMANE," VIEW FROM ABOVE.

1897. This saddle belonged to the class of frame saddles and was provided with movable sidebars. It was generally presumed that this saddle was similar in its adjusting mechanism to the adjustable collar, in which separate adjustments are necessary in order to obtain proper fitting. This, however, was not necessary in the adjustable saddle. The action of the sidebars was strictly automatic, the two parts through a peculiar connecting device placing themselves in proper position to fit the horse's back. It is said to have been in use by the Belgian field artillery, but it has not found favor with our service.

The successful elimination of the defects mentioned has

been obtained in part by means of a new and singular saddle construction. It has very recently been adopted by many officers, and is built by the court saddler, Friedrich Beyer, No. 7 Theresienstrasse, Munich, Germany.

The new steel spring tree saddle "Germane" owes its construction to the numerous complaints made concerning the hard and uncomfortable seats of the saddles heretofore in use. It therefore seems probable that the interest of all mounted and riding gentlemen will be attracted to the new saddle, which is already in use by a large number of the offi-

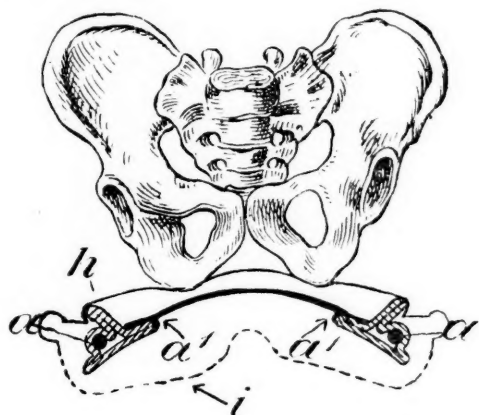


FIG. 4. CROSS-SECTION OF THE SADDLE "GERMANE."

cers on duty at the Royal Bavarian School of Equitation in Munich. These gentlemen all speak in terms of highest praise of the superior qualities and advantages of the new saddle. The latter appear in an improved action of the saddle upon the most difficult backs; an improved effect of the forward driving buttocks and thighs; a comfortable if not almost ideal seat for the thinnest and most pointed buttocks. Rupture of the saddle frame from ordinary causes is practically impossible.

In the wood and leather trees heretofore in use (Fig. 1), the sharp pointed pelvic bones, provided with comparatively thin muscular covering and surrounded with sensitive nerves,

bear directly upon the sharp edges of the side-bars, more especially if the saddler has drawn the seat leather too low or too loose and the saddle has been in long use. (Fig. 2.)

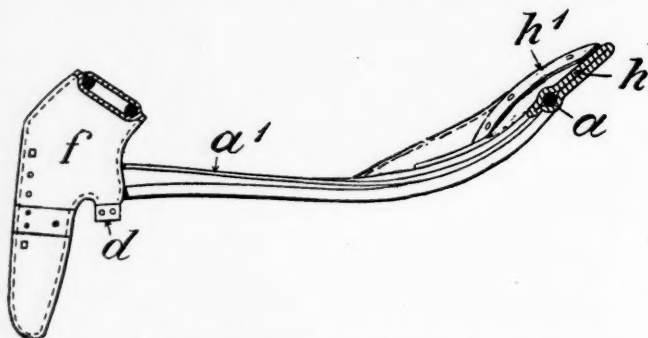


FIG. 5. LONGITUDINAL SECTION OF THE SADDLE "GERMANE."

If, on the other hand, the seat leather is too tightly drawn, thus raising the buttocks from the sidebars, the seat from the beginning is too hard and too much arched — one

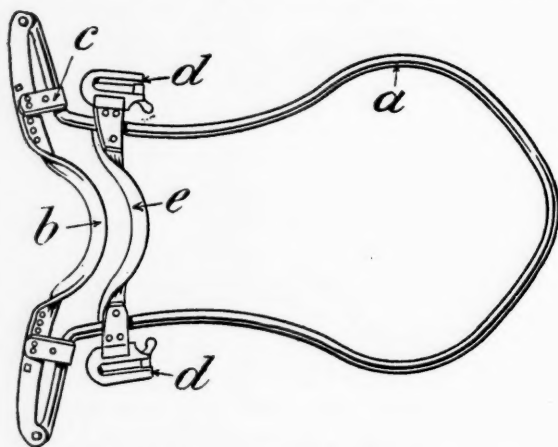


FIG. 6. SADDLE "GERMANE." SKELETON FROM ABOVE.

might almost say too pointed. The effect of this is not only painful pressure upon the pelvic bones, but a force tending

to spread them apart. Which of these two cases is most likely to cause pain is a question which cannot be settled by the opinions of professional riders, but must be determined by individual experience.

The steel spring tree saddle "Germane" completely eliminates both of these serious defects by means of a singular construction of the frame.

The new saddle-frame is shown from various view points in Figs. 3 to 7 inclusive.

In Fig. 3 the tree is shown in outline from above; in Fig. 4, in cross-section, and in Fig. 5, in longitudinal section. Figs. 6 and 7 show the groundwork or skeleton of the saddle

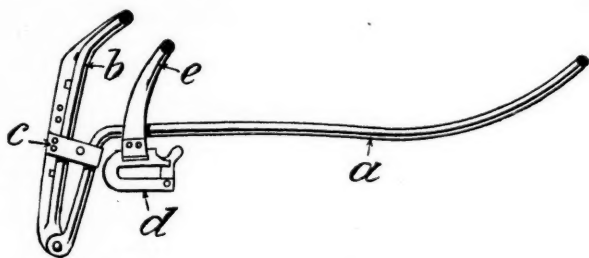


FIG. 7. SADDLE "GERMANE." LONG SECTION OF SKELETON.

frame, the first from above, and the latter in longitudinal section. Fig. 8 shows the saddle complete.

The tree of the new saddle (Fig 3) consists essentially of a leather covered steel skeleton (Fig 6). The lyre-shaped sidebars of the skeleton (a Fig 6) are secured at their free ends and held firmly in place by the headpiece (b), to which they are riveted. The short braces (c) provide the necessary stiffening. Directly in rear of the headpiece, a secondary headpiece or support (e) is attached to the sidebars and carries the stirrup irons (d). The lateral arms of the headpiece are provided with a flange to which the saddle rings and other devices for carrying pouches and saddle bags are attached.

The frame formed by the uniting of the two headpieces with the ends of the sidebars is covered on both sides with leather (figures 3 and 5) and is thus formed into a strong,

stiff and compact leather body. Additional strength and stiffening for the frame is provided through a leather covering for the sidebars (a Figs. 3 and 5) extending around the rear of the saddle. This covering is securely fastened to the headpiece, the sidebars and rear of the saddle, and is stiffened by the processes in general use. It thus forms at the rear a broad surface for the support of the saddle cushion and augments the spring effect of the steel skeleton frame.



FIG. 8. COMPLETE SADDLE "GERMANE."

The most sensitive rider therefore finds in the "Germane" saddle a thoroughly comfortable and pleasant seat. Contrary to the trees heretofore in general use the weight of the rider is not supported entirely by the seat leather, but by the latter in conjunction with the soft saddle cushion.

Through this construction, the rider is enabled to sit close to the horse's back, the reciprocal movements of the rider's body with those of the horse thus attaining the maximum effect in comfort to the rider and control of the horse.

Other advantages, in addition to those enumerated, are to be found in the new saddle.

Rupture of the headpiece, common enough in the older trees, is practically impossible in the new tree, inasmuch as

the secondary headpiece, while carrying the stirrup irons, also provides a powerful support to the principal headpiece. (Fig. 6.)

The headpiece being attached to the sidebars in a very simple manner, it is practicable for any saddler to change the headpiece for another to suit the form of the particular horse, without the aid of an iron worker or of a saddle factory. The troublesome but necessary makeshift of padding the saddle in order to make it fit the backs of exceptional horses will therefore be obviated. Likewise the slipping of the saddle forward and the dangerous pressure resulting upon the withers will be prevented.

Through the improved construction of the headpiece, the saddle nails are attached directly to it. The carrying of equipment or saddle pockets is thus simplified and rendered more secure.

The application of the new construction to ladies' saddles has been productive of most favorable results.

It may be finally observed in comparing the new construction with the old, that the cost of the former, though in the first place some fifteen marks greater, is in the end really less, by virtue of its greater durability and the reduced expense of repair. The new saddle can be re-covered by any good saddler.

The foregoing remarks relating to the description of the new saddle "Germane," rest upon established facts.

It may consequently with certainty be predicted that this saddle has a great future before it.

A VISIT TO WASHINGTON'S HEADQUARTERS.

BY GENERAL W. H. CARTER, UNITED STATES ARMY.

DURING the years 1780-81-82, the Marquis de Chastellux, a member of the French Academy and a major general in the French army, serving under Count de Rochambeau, made a tour of the colonies from New England to the James River in Virginia. His description of his experiences were translated and published. The Marquis enjoyed the friendship of Washington, who continued to correspond with him for some time after the former's return to France. There are many details of colonial and army life in this book of travels, some extracts from which may be of interest at the present time.

After a visit of inspection to West Point and the defenses of the Highlands, he made his way through New Jersey to Washington's headquarters, where he arrived as a dinner party of the General's were about to quit the table. Instructions were immediately given for the following day in order that the Marquis might see the army which was about to march to winter quarters. Let him tell his own story:

"Whilst we were at breakfast, horses were brought, and General Washington gave orders for the army to get under arms at the head of the camp. The weather was very bad, and it had already begun raining; we waited half an hour; but the General, seeing that it was more likely to increase than diminish, determined to get on horseback. Two horses were brought him, which were a present from the State of Virginia; he mounted one himself, and gave me the other. Mr. Lynch and Mr. de Montesquieu, had each of them, also, a very handsome blood horse, such as we could not find at Newport for any money. We repaired to the artillery

camp, where General Knox received us; the artillery was numerous, and the gunners, in very fine order, were formed in parade, in the foreign manner; that is, each gunner at his battery, and ready to fire. The General was so good as to apologize to me for the cannon not firing to salute me; he said, that having put all the troops on the other side of the river in motion, and apprised them that he might himself march along the right bank, he was afraid of giving the alarm, and of deceiving the detachments that were out.

"We gained at length, the right of the army, where we saw the Pennsylvania line; it was composed of two brigades, each forming three battalions, without reckoning the light infantry, which were detached with the Marquis de la Fayette. General Wayne, who commanded it, was on horseback, as well as the brigadiers and colonels. They were all well mounted; the officers also had a very military air; they were well ranged, and saluted very gracefully. Each brigade had a band of music; the march they were then playing was the Huron. I knew that this line, though in want of many things, was the best clothed in the army; so that His Excellency asking me whether I would proceed and see the whole army, or go by the shortest road to the camp of the Marquis, I accepted the latter proposal. The troops ought to thank me for it, for the rain was falling with redoubled force; they were dismissed, therefore, and we arrived heartily wet at the Marquis de la Fayette's quarters, where I warmed myself with great pleasure, partaking from time to time of a large bowl of grog, which is stationary on his table, and is presented to every officer who enters. The rain appearing to cease, or inclined to cease for a moment, we availed ourselves of the opportunity to follow His Excellency to the camp of the Marquis. We found all his troops in order of battle on the heights to the left, and himself at their head, expressing by his air and countenance that he was happier in receiving me there than at his estate in Auvergne. The confidence and attachment of the troops are for him invaluable possessions, well acquired riches, of which nobody can deprive him; but what, in my opinion, is still more flattering for a young man of his age, is the influence and con

sideration he has acquired among the political, as well as the military order; I do not fear contradiction when I say that private letters from him have frequently produced more effect on some States than the strongest exhortations of the Congress. On seeing him, one is at a loss which most to admire, that so young a man as he should have given such eminent proofs of talents, or that a man so tried should give hopes of so long a career of glory. Fortunate his country if she knows how to avail herself of them; more fortunate still should she stand in no need of calling them into exertion!

"I distinguished with pleasure among the colonels, who were extremely well mounted, and who saluted with great grace, M. de Gimat, a French officer, over whom I claim the right of a sort of military paternity, having brought him up in my regiment from his earliest youth. This whole vanguard consisted of six battalions, forming two brigades; but there was only one piquet of dragoons or light cavalry, the remainder having marched to the southward with Colonel Lee. These dragoons are perfectly well mounted, and do not fear meeting the English dragoons, over whom they have gained several advantages; but they have never been numerous enough to form a solid and permanent body. The piquet that was kept with the army served then as an escort to the provost marshal, and performed the functions of the Marechaussee, until the establishment of a regular one, which was intended.

"The rain spared us no more at the camp of the Marquis than at that of the main army; so that our review being finished, I saw with pleasure General Washington set off in a gallop to regain his quarters. We reached them as soon as the badness of the roads would permit us. At our return we found a good dinner ready, and about twenty guests, among whom were Generals Howe and Sinclair. The repast was in the English fashion, consisting of eight or ten large dishes of butcher's meat, and poultry, with vegetables of several sorts, followed by a second course of pastry, comprised under the two denominations of pies and puddings. After this the cloth was taken off, and apples and a great

quantity of nuts were served, which General Washington usually continues eating for two hours, toasting and conversing all the time. These nuts are small and dry, and have so hard a shell (hickory nuts) that they can only be broken by the hammer; they are served half open, and the company are never done picking and eating them. The conversation was calm and agreeable; His Excellency was pleased to enter with me into the particulars of some of the principal operations of the war, but always with a modesty and conciseness which proved that it was from pure complaisance he mentioned it. About half past seven we rose from table, and immediately the servants came to shorten it and convert it into a round one; for at dinner it was placed diagonally to give more room. I was surprised at this maneuver, and asked the reason of it; I was told they were going to lay the cloth for supper. In half an hour I retired to my chamber, fearing lest the General might have business, and that he remained in company only on my account; but at the end of another half hour I was informed that His Excellency expected me at supper. I returned to the dining room, protesting against this supper; but the General told me he was accustomed to take something in the evening; that if I would be seated I should only eat some fruit and assist in the conversation. I desired nothing better, for there were then no strangers, and nobody remained but the General's family. The supper was composed of three or four light dishes, some fruit, and above all, a great abundance of nuts, which were as well received in the evening as at dinner. The cloth being soon removed, a few bottles of good claret and madeira were placed on the table.

"The weather being fair, on the 26th I got on horseback, after breakfasting with the General. He was so attentive as to give me the horse he rode on the day of my arrival, which I had greatly commended: *I found him as good as he is handsome; but above all, perfectly well broke, and well trained, having a good mouth, easy in hand, and stopping short in a gallop without bearing the bit. I mention these minute particulars because it is the General himself who breaks all his own horses; and he is a very excellent and bold horseman, leaping the*

highest fences, and going extremely quick without standing upon his stirrups, bearing on the bridle, or letting his horse run wild, circumstances which our young men look upon as so essential a part of English horsemanship, that they would rather break a leg or an arm than renounce them.

"Here would be the proper place to give the portrait of General Washington; but what can my testimony add to the idea already formed of him? The continent of North America, from Boston to Charleston, is a great volume, every page of which presents his eulogium. I know, that having had the opportunity of a near inspection, and of closely observing him, some more particular details may be expected from me; but the strongest characteristic of this respectable man is the perfect union which reigns between the physical and moral qualities which compose the individual; one alone will enable you to judge of all the rest. If you are presented with medals of Cæsar, of Trajan, or Alexander, on examining their features you will still be led to ask what was their stature, and the form of their persons; but if you discover, in a heap of ruins, the head or limb of an antique Apollo, be not curious about the other parts, but rest assured that they all were conformable to those of a god. Let not this comparison be attributed to enthusiasm! It is not my intention to exaggerate, I wish only to express the impression General Washington has left on my mind; the idea of a perfect whole, that cannot be the produce of enthusiasm, which rather would reject it, since the effect of proportion is to diminish the idea of greatness. Brave without temerity, laborious without ambition, generous without prodigality, noble without pride, virtuous without severity, he seems always to have confined himself within those limits, where the virtues, by clothing themselves in more lively but more changeable and doubtful colors, may be mistaken for faults. This is the seventh year that he has commanded the army, and that he has obeyed the Congress; more need not be said, especially in America, where they know how to appreciate all the merit contained in this simple fact. Let it be repeated that Conde was intrepid, Turenne prudent, Eugene adroit, Catinat disinterested. It is not thus that Washington

will be characterized. It will be said of him, *at the end of a long civil war he had nothing with which he could reproach himself.* If anything can be more marvelous than such a character, it is the unanimity of the public suffrages in his favor. Soldier, magistrate, people, all love and admire him; all speak of him in terms of tenderness and veneration. Does there then exist a virtue capable of restraining the injustice of mankind; or are glory and happiness too recently established in America, for envy to have deigned to pass the seas?

"In speaking of this perfect whole of which General Washington furnishes the idea, I have not excluded exterior form. His stature is noble and lofty; he is well made and exactly proportioned; his physiognomy mild and agreeable, but such as to render it impossible to speak particularly of any of his features, so that in quitting him, you have only the recollection of a fine face. He has neither a grave nor a familiar air, his brow is sometimes marked with thought, but never with inquietude; in inspiring respect, he inspires confidence, and his smile is always the smile of benevolence.

"But above all, it is in the midst of his general officers that it is interesting to behold him. General in a republic, he has not the imposing stateliness of a Marechal de France who gives the order; a hero in a republic, he excites another sort of respect, which seems to spring from the sole idea that the safety of each individual is attached to his person. As for the rest, I must observe on this occasion that the general officers of the American army have a very military and a very becoming carriage; that even all the officers, whose characters were brought into public view, unite much politeness to a great deal of capacity; that the headquarters of this army, in short, neither present the image of want nor inexperience. When one sees the battalion of the General's guards encamped within the precincts of his house; nine wagons, destined to carry his baggage, ranged in his court; a great number of grooms taking care of very fine horses belonging to the general officers and their aids-de-camp; when one observes the perfect order that reigns within these precincts, where the guards are exactly stationed, and where the drums beat an alarm, and a particular retreat, one is

tempted to apply to the Americans what Pyrrhus said of the Romans."

The Marquis later visited Philadelphia, and describes a dinner at the house of Chevalier de la Luzerne, French ambassador. Amongst those whom he met at dinner was "Colonel Laurens, son of Mr. Laurens, late President of Congress, and now a prisoner in the Tower of London; he speaks very good French, which is not surprising, as he was educated at Geneva, but it is to his honor, that being married in London, he should quit England to serve America. He has distinguished himself on several occasions, particularly at Germantown, where he was wounded." To this the translator has added the following note: "Among the numerous traits that might be cited to do honor to this illustrious young man, so prematurely and unfortunately lost to his family and his country, the translator has selected the following, extracted from the journals of Congress:

"THURSDAY, November 5, 1778.

"*Resolved*, 'That John Laurens, Esq., aid-de-camp to General Washington, be presented with a Continental commission of lieutenant colonel, in testimony of the sense which Congress entertains of his patriotic and spirited services as a volunteer in the American army, and of his brave conduct in several actions, particularly in that of Rhode Island on the 29th of August last; and that General Washington be directed, whenever an opportunity shall offer, to give Lieutenant Colonel Laurens command agreeable to his rank.'

"FRIDAY, November 6, 1778.

"A letter of this day, from Lieutenant Colonel John Laurens was read, expressing 'his gratitude for the unexpected honor which Congress was pleased to confer on him by the resolutions passed yesterday, and the high satisfaction it would have afforded him could he have accepted it without injuring the rights of the officers in the line of the army, and doing an evident injustice to his colleagues in the family of the commander-in-chief; that having been a spectator of

the convulsions occasioned in the army by disputes of rank, he holds the tranquility of it too dear to be instrumental in disturbing it ; and, therefore, entreating Congress to suppress the resolve of yesterday, ordering him a commission of lieutenant colonel, and to accept his sincere thanks for the intended honor.' Whereupon

"*Resolved*, That Congress highly approve the disinterested and patriotic principles upon which Lieutenant Colonel Laurens has declined to accept the promotion conferred on him by Congress."

It is a far cry from the Revolution to the War with Spain, and one is apt to say, in these iconoclastic days, that such things no longer occur, yet it is an established fact, at least in two cases known to the writer, that young men of merit and capacity, appointed to volunteer staff commissions in the war with Spain, presumably because their fathers were influential Senators, declined the appointments with the full consent and approval of their distinguished parents.

It was a genuine privilege to have access, upon terms of intimacy, to those controlling the destinies of the colonies. It is also a privilege to have the opportunity to read the opinions of so distinguished a Frenchman upon our military system and the customs and manners of the Revolutionary period in the Colonies.

Editor Cavalry Journal:

CHICAGO, ILL., October 31, 1907.

In reading Marquis de Chastellux's journal of his travels I was impressed with certain parts which may be of interest to the young officers, who must ever constitute the main support of the CAVALRY JOURNAL. When I was the editor I was sometimes puzzled for an article which would lend variety to the contents, and it is the memory of that fact which has led me to quote these extracts.

Yours very truly.

W. H. CARTER.

THE BRITISH REMOUNT SYSTEM.

BY COLEMAN NOCKOLDS, VETERINARIAN FIRST CAVALRY.

THE British Remount System is a branch of the Quartermaster General's Department, and is controlled by the Director of Transport and Remounts at the War Office. The term quartermaster will soon be a thing of the past in connection with the British military system (except, perhaps, when referring to the Quartermaster General). The following is found in paragraph No. 149, The King's Regulations and Orders, 1904:

"Commanding officers will report through generals commanding to the War Office whether they recommend the continuance in active service of the quartermaster, serving under their command on their completing ten, fifteen and twenty years service in those ranks respectively."

Quartermasters are being retired as quickly as the rules of the service admit. The executive functions of the Quartermaster General in the several commands are carried out by the Army Service Corps. Everything in the line of work that would otherwise detract from the fighting strength of the army by the employment of the enlisted men from the ranks is done by the Army Service Corps. This is really a working corps to serve the army and to supply the needs of its daily life. Its chief duties are caring for and issuing of food and rations for men and horses and providing transportation of every kind needed by the army. They also do the clerical work of the army. They have charge of the barracks, stables and their furniture, allot them to the troops, and attend to the supply of fuel, light and water. Men of every trade that can be used in the service are enlisted in

its ranks. Comparatively lately, the duty of providing the personnel for the remount depots has been given this corps.

In the United Kingdom there are four remount companies of the Army Service Corps, with headquarters at Woolwich and Dublin. There are four farms attached to depots, which are designated by numbers: No. 1, depot, Lusk; No. 2 depot, Plumstead Marshes; No. 3 depot, Melton Mowbray; No. 5 depot, Aborfield Cross. The cadre of Nos. 1 and 2 are supplied from the remount companies of the Army Service Corps. Depots Nos. 3 and 4 have a civilian personnel. Each depot is independent and its administration is directly under the War Office.

The general function of these depots is the receiving and issuing of new purchases and recuperating stations for convalescent and wornout animals. Usually after maneuvers on a large scale these farms are taxed to their limits with animals temporarily inefficient, which otherwise would require the enlisted strength of their regiment to look after them, thus interfering with the drills and training which are so necessary for the complete efficiency of the fighting man. In the event of mobilization these depots are expanded, and they are cleared to admit newly purchased horses; the sick unsuitable and those under six are removed; all animals on hand fit for active service are sent to units needing them, chiefly those that are mobilizing to war strength; all outgoing regiments are relieved of inefficient and efficient are given in exchange. At each depot the mobilization sheds are used for the concentration of those animals that are on the registration lists for supply during war.

The Woolwich remount depot is typical, and the farm connected with it is as large as any of the others, but I cannot say that it impressed me as an ideal one for its purpose. There is not room enough, and the stables, like all other modern ones under the control of the army, are one storied, many of them being divided into a number of loose boxes, which take in the whole depth of the building, and open into quadrangles which they surround; the rest are simply large buildings, divided into single stalls. Besides the stables there are buildings on the same plan fitted up as

shoeing shops, veterinary pharmacies, offices, carriage and equipment sheds and quarters for the non-commissioned officers and men of the Army Remount Service and Veterinary Corps. The exercising grounds are soft turf and laid out for saddle and driving purposes; there are high and broad jumps, and places to exercise horses without riders, so arranged that one man can exercise a number of horses at all paces. There are also corrals and chutes and other devices arranged so that horses can be easily caught and handled. The forges are fitted with special arrangements for handling and shoeing young animals, extraordinary precautions being taken that they are neither frightened or hurt during their first lessons in shoeing. Most approved harness and rigging for breaking and gentling young horses are in use.

Attached to each remount depot is a detachment of the Army Veterinary Corps which with the Army Service Corps makes up its personnel. The commanding officer and his adjutant are officers of the Army Service Corps.

The remount department is responsible for the training and conditioning of animals and turning them out fit for work, shod up and in good wind. All animals that have become unfit for service are taken in and serviceable animals exchanged for them.

During active service, base depots are established, which are in charge of deputy assistant director of remounts, and they are responsible for the reception of all animals arriving by sea, their issue to depots; the organizing of convalescent farms on the lines of communication, and for the keeping of all animal and other accounts connected with their department. Each advance depot is also commanded by a deputy assistant director, who is responsible for keeping the assistant director informed of all probable requirements.

Embarkation depots are on the same lines as ordinary peace depots. They are required to accommodate at least six hundred animals, must be in thorough working order, and always have a proportion of extra animals on hand to take the place of any that may be rejected at the ship's side. Rejected animals, except those seriously injured, are kept at

the embarkation depot until ready to ship, and those in bad condition are sent to the veterinary hospital.

At a base depot all the functions of an ordinary remount depot can be carried out as regards training, recuperation, etc. Regular cattle trains, under the control of the Army Service Corps convey the animals to and fro. After animals have been received at a base depot they are forwarded to the advance depots, from whence they are distributed to the troops on the fighting line as required. The officer in charge of an advance depot is also required to replace casualties. Each depot is divided into sections, into which animals are passed and classified as "fit for immediate issue," "temporary detention," and "prolonged rest or disposal;" these latter are immediately sent to a base depot. In general the functions of the depots are to feed one another in efficients from the embarkation depots to the troops in the field, and to relieve one another of inefficients back again to the embarkation depot.

The duties of the Remount Service are to supply the army with suitable animals for the requirements of each branch, to keep the units up to the standard, to regulate the issues and maintain an equal establishment in each unit; to control the castings (horses that are to be condemned), and to make recommendations with a view to economical administration.

The Army Remount Service formulate plans so as to meet the contingencies of war, by keeping tab on the available supply of horses by a system of registration (described later on) and by collecting reliable information as to the conditions of the horse markets of the world, and the likely locations where animals are to be found. It also, through the director of transports, prepare for the necessary ships and the necessity of fitting at foreign ports, ships that are not already fitted as horse transports. Under the director of transports and remounts, the assistant director of remounts at headquarters is responsible for the maintenance of the intelligence section of the office, which deals with supplies and capabilities of over sea countries; and with information, capacity and suitability of ports and railway communica-

tions, with a view of the contingencies of war. He maintains a roster of officers and others suitable and available for the remount service, at home and abroad, either in peace or war. He is assisted by a staff captain. There are three inspectors of remounts who are the purchasing and distributing officers for the branches of the service for which they are responsible, viz: Cavalry, artillery, royal engineers, army service corps, and other draft animals. They control the admissions to and issues from the respective depots and are responsible for acquiring the necessary supply.

The deputy assistant directors of remounts are attached to the administrative staff of the general officers commanding in chief, and are under the control of the War Office. They are advisers of the generals commanding on remount matters generally; they are responsible for the maintenance of reliable information within their districts, for the provision of the necessary supplies of animals for the troops in the command upon mobilization, and for taking general and disciplinary charge of the remount depots. They also keep a check on the public animals up for casting and supervise the same. Remount officers are on no account employed on other than remount duty either during peace or war. Nor are they permitted to purchase animals for their own use, or to enter into business relations with persons in whom they are directly or indirectly interested without special sanction from the War Office to do so, and they are expected to give their whole attention to the work of their government.

Inspectors of remounts purchase all public animals, and distribute them. They collect information bearing on the horse markets in their reach, and they are held responsible for the economical expenditure of public funds. They have free access to public stables at all times. They are required to keep a diary of the exact details of their work, the number of horses seen and purchased, the veterinary officer who accompanied them, the disposition of their purchases, and their accounts must in all cases show the amount paid for the horse, all contingent expense connected with it, and other details.

Animals are purchased under ordinary peace conditions

by officers of the remount service, who are permanently detailed for that service. They cause it to be known in the district to which they are detailed that they will be at a certain place at a specified time for the purpose of purchasing animals for the particular branch of the service and the kind that they need.

There is a scheme of *registration* by which the British army is furnished with remounts during a national emergency. Remount officers are required to be thoroughly posted as regards the details of this system. It consists of a reserve of horses, established by a voluntary registration of horses by their owners. Private individuals, firms and other owners having a number of animals at their disposal are invited to offer them for registration, and those which on the inspection of a remount officer are found suitable for army purposes are registered, the owner signing an agreement to sell on demand and receiving in return an annual subsidy of ten shillings. These animals are inspected annually by officers of the remount department; the class of work for which they are suited is noted and the price for which they can be bought, if taken during the year, is arranged. By the terms of the agreement the owner is bound to furnish the animal agreed upon or pay a large penalty. These agreements can be terminated by either party by a six months' notice. There are over fourteen thousand horses registered under this system in Great Britain which can be mobilized in about six days. The agreement requires that their owners should have forty-eight hours' notice in which to make delivery. To facilitate this registration the country is divided into fifty districts, a remount and a veterinary officer being detailed for each district.

By special agreement with companies having a large number of draft animals which require large collars, the collars and head stalls are sent with those animals.

Many of these registered horses are the property of masters of hounds and huntsmen, and these make excellent chargers and troopers for the medium and heavy cavalry, and being always in condition are an excellent type of war horse for immediate use.

The two most important things for an ideal remount system which England lacks, are a sufficient home supply of animals and plenty of room to work in. She has to depend to a large extent for her horse supply on her colonies, and even on foreign countries, as was fully demonstrated during the late South African War. It is different with the United States, which has more of both than she needs for that purpose.

England evidently patronizes home products, as I looked over several hundreds of remounts and only saw one foreign horse branded with the broad arrow. He was from the United States, and a splendid type of trooper he was, superior in many respects to many of the home-bred horses.

The system used by the remount department when purchasing in foreign countries is much the same as at home. The officers obtain all the information possible from H. M. consuls and other interested parties in the location or country to which they are sent. They establish embarkation depots, and fit them out in a similar manner to the depots at home.

The following are the specifications for corrals and inspection grounds:

For Handling Horses and Mules.—All to be of the strongest material and to be disinfected constantly; strong, well-built corrals; paddocks for inspection, with good water and food; collecting pens; two chutes for bridling; "temporary reject" pen; pen for rejected horses; pen for accepted horses; gallop, 300 yards long; forge and appliances; branding chute, strongly constructed; veterinary inspection pen; entraining pens. The inspection ground is required to be close to the railroad, and not nearer than a specified number of miles to a city limit, as a precaution against infection.

Minimum Labor Required at Each Inspection.—Three riders for every 100 horses, and not less than five riders if 100 horses are exceeded; one leader for every rider; one blacksmith; three branders and clippers; six helpers; one clerk, and one foreman.

Horses are to be caught up and haltered at least one hour before the inspection commences and kept perfectly quiet.

The inspector will decide whether the horses are to be ridden bareback or in the saddle. Only snaffle bridles will be allowed. Riders will be required to saddle, mount and dismount unaided in the presence of the inspector.

The purchasing officer is responsible for the discipline and general management of an inspection, on the lines laid down by the head of the commission. He decides as to the conformation, size, quality and action of the animal, suitability for military service, and as to what class the animal is suited. He supervises the management of shipping and other expenses inside his district.

The veterinary officer is responsible for the health, sanitation, and unsoundness in every particular, and the recording of ages. No animal will be accepted under any pretence whatever without the sanction of the veterinary officer; his decision is final, and is attested by his signature in the inspection book.

The superintending officer of the depot or corral sees to the entraining and detrainning of stock; he makes all arrangements for the conveyance of animals on the railroad, to pastures, and to the railroads. He controls the sufficiency of forage, inspects the same as to quality, and keeps a reserve on hand in case of emergencies, sees that the water supply is good, and that all windmills or engines are in good repair. He sees that the fences, hay racks, and loose woodwork and feed troughs are in good repair, and that there are no nails, barbed wire, or anything that might injure stock lying around any part of the ground occupied by the depot.

Specifications for Horses or Cobs.—Age five to nine years. Riding cobs (not ponies), geldings and mares (not in foal), in fair flesh and condition, able to carry fifteen stone under active service conditions; sound in action, wind and eyes; practically sound otherwise; strong, active and sufficiently fast; fair riding shoulders, strong quarters and loins; good condition and constitution; short, well shaped back and legs, roomy and well ribbed; good, clear, straight action; strong, clean legs and feet, properly shaped and placed; quiet, without vice, well broken and mouthed; teeth complete, well shaped and not tampered with; color not very light gray

or white. The inspecting officer is the sole judge as to suitability.

The following are grounds for rejecting any horse: Small, weak quarters, flat sides, split up and leggy, long, weak and bending pasterns, small joints, close hocks or action, legs not well placed, any mark of brushing except it is due to bad shoeing; any indication of weak constitution, very straight pasterns, small or uneven feet, vice of any kind, evidence of fistulous withers, evidence of operations on the teeth, bad constitution, bad condition, parrot-mouthed or undershot, capped elbows, marks of whip or spur not done under the eye of the inspector, or undue sweating, same being probably indicative of vice or bad manners, very short docks.

In his final reports the purchasing officer describes the place where the commission carried on its operations, the date on which he left England, when he arrived, remarks on the passage, accommodation of the ship, etc.; information as to the means of getting about; accommodation and railway facilities; persons who proved useful; how they were able to help; persons, locations, etc., to be avoided; horses, their class advantages, disadvantages, numbers available, to what degree trained and what for, their characters, staple food, style of shoeing, and at what age they are locally put to work, what kind of work, that is, suitability for light draught, riding and for light and heavy cavalry. Ordinary local market prices at different ages and prevailing market conditions; facilities for moving horses by rail, etc.; for caring for them when bought and for embarking them.

The class of men to be dealt with as helpers, for all operations of purchase, traveling, entraining, embarkation, etc.; the wages to each class, the best means of getting the best men; the best way of getting the horses together; the finance banks used; how accounts are kept, payments made, and if they are audited locally.

As a general rule in the time of peace horses are purchased between the ages of six and seven.

In England lists showing the names of private persons and companies owning stocks of horses from whom they may be bought in cases of emergency, are kept, also the

units mobilizing in the command, with the number and class of horse required to complete each one from the peace to the war establishment.

A list of thoroughly qualified gentlemen in districts who know the country well and who would be useful and willing to act as purchasers on emergency. These gentlemen are kept posted in time of peace so that they may be on the look-out for opportunities of availing themselves of knowledge likely to be of use to the remount officer.

Clear information is required from time to time at short notice on the following subjects: Registration, horse population, importations, purchases by foreign governments, lists of civil veterinary surgeons and smiths, cost of feeding, railway facilities, depots, casting, locomotion, purchasers on emergency, ports of embarkation, facilities and suitability.

In the performances of their ordinary duties remount officers are required to locate animals that would do for government service that are located in the area to which they are detailed. The horse population of these areas should be classified as follows: Heavy draught; light draught and saddle; estimated under five years of age; over five if suited for military use; information as to the number of mules, donkeys and stallions in the district. Officers are warned against overestimating numbers of animals available in their district.

A confidential record is kept of thoroughly reliable civil veterinary surgeons particularly fitted for remount work at home or abroad in case of war, also of smiths, and the current rate of wages paid in that particular locality. A list of undesirables of both these classes is also made out.

The local cost per head for feeding is known, as well as the approximate cost of grazing facilities. The British government considers the method of buying supplies from large contractors is one to be avoided if possible, and advocates the patronage of the small producers as far more satisfactory to both receiver and seller, and advises officers concerned against the letting out of large contracts whenever it is possible to avoid doing so.

Although the accommodations at the remount depots

cannot be compared as far as riding and training goes with most of the cavalry and royal horse artillery, regimental headquarters or the riding establishment at Canterbury, nevertheless animals are broken in for saddle and draught purposes and bitted and handled in a most thorough manner. After this preliminary training a horse is selected by the inspector of remounts for each soldier and forwarded direct to the riding establishment at Canterbury, after about three weeks at the depot. There the horse receives a severe course of training for whatever branch of the service he is best fitted. On the completion of this course the animals to be issued to the cavalry of the line are drafted to those regiments needing them. The soldiers of the Household cavalry and the Royal Engineers take the horses allotted to them, with them back to their respective units; and the horses trained for the Royal Horse Artillery and the Army Service Corps are sent to the depot at Woolwich. After arrival at the units to which they belong all these animals are required to go through a special course of regimental training according to the outfit to which they belong. When the riding master of the regiment can give a certificate to the effect that the animal is competent to do regimental duty, and not before, he is admitted to the ranks. This is also true in the case of officers' chargers.

The system of supplying officers with chargers in the British service seems to be a good one. There is a charge of ten pounds (about fifty dollars, American), made by the government, for which an officer is supplied with a charger as long as he is in the service. If the animal is killed or dies or is rendered unfit for duty, it is replaced by one just as good without further charge; or if an officer is ordered to duty to a place where he cannot take his horse, he is found with a charger in the place of the one left behind. Animals bought by the government as officers' chargers are in every way a very superior class of horse, and a great deal more money is paid for the charger than is paid for the ordinary trooper.

Remounts are treated as such for a period of twelve months after they join their regiments. They commence

quiet work immediately after they are pronounced fit for the same by the veterinary officer in charge, and the duration of their daily exercise is gradually increased as their feed of corn is augmented. At no time is their work such as to reduce their condition or induce fatigue. They are allowed plenty of room and air, and closely watched for the appearance of any signs of disease. They are never put in the same stable with the older horses, and their hind feet are left unshod until after training. A non-commissioned officer is put in charge and one good man looks after two remounts. These men are excused from all duties except from parade. Special care is taken with the fitting of saddles, and the saddle trees are fitted without panels or blankets. Once every week during drill season all the horses are saddled with stripped saddles, and examined to determine as to whether there are any saddles that need readjusting. Once every six months the whole of the saddle horses in a cavalry regiment have their saddles stripped and fitted under the personal supervision of the commanding officer, who sees that the saddle trees fit the horses' backs.

The financial losses to the English during the late South African War, occurring through using green remounts, both in deaths and other casualties, were among their largest, and some few reverses, especially in minor engagements, were attributed to this cause. Among other reasons that remounts should not be allowed to join regular units without preliminary training and handling, are the following: They are often soft through standing and being fed up with a view of selling them, and in this case it takes several weeks to get them into condition, during which time the conformation (transitory) is constantly changing, and the saddle that fits during the first week does not fit later. Most probably if more attention was given to the foregoing, there would occur a less number of sore backs and chafes when on long marches. Very young animals are not completely developed and they cannot stand the wear and tear of the ranks; their bones are soft and they are liable to complaints peculiar to the young horse. The result is a break-down, or spavin, splints, ring-bones and kindred diseases occur and render them unfit for

military purposes even before they have become trained. Or as a result of ordinary military operations before they are matured, they become run down and predisposed to chest diseases or other ailments, which either takes them off or renders them useless.

Horses that are not mouthed at whatever age, when taken and bitted with the ordinary service bit, are often ruined either by injuries to their mouths and jaws, or are made confirmed bolters. Horses of any class would last longer and be of more use to the services if they went through a gradual and thorough training and were fit in every way before joining the ranks; in this way many, if not all, the existing evils could be avoided and the government would be the gainer in every way.

Of course, remount depots and farms are a long way past the experimental stage in the European countries. For the sake of experiment one or more remount depots should be established in the United States. Some of the lately disbanded posts offer ideal facilities for this purpose. The stables, buildings, corrals, water, etc., could be used for the animals, and the storehouses and quarters for the attendants. It costs no more to feed remounts at a remount station than at a garrisoned post. The personnel could be made up from volunteers from different organizations who were interested and recommended by their troop or battery commanders as adapted for that particular work. It would be necessary that most of them be good riders and some of them good horsemen. More than enough officers could be found who are both adapted and enthusiastic enough over the scheme to volunteer for it and make it a success. The guard duty would be no more than is necessary for the ordinary ranchman, and could be done by detail. The system that I would recommend is a combination of those of England and the chief continental countries.

THE CAVALRY IN THE EAST ASIATIC CAMPAIGN.*

LESSONS AND CRITICAL CONTEMPLATIONS

BY COUNT GUSTAV WRANGEL, CAPTAIN AUSTRIAN CAVALRY.

I. INTRODUCTION.

IT almost seems as if the limited and faulty performances of the cavalry in the Russo-Japanese War have had a depressing effect on the pens of those called on to criticise and report their doings.

In spite of the fact that the literature of this campaign is already very voluminous, the cavalry has been almost entirely overlooked, and it seems to us that this fault should, in the interest of the cavalry service, be remedied as soon as practicable.

Entirely ignoring the part taken by the cavalry in the Manchurian campaign has led to erroneous ideas, and to combat these false impressions is our main object, for fear that they gain more and more credence.

Our conviction, that strong cavalry is at all times an essential factor in every army corps, is supported by that high authority, the Japanese. According to the latest information obtainable, the Japanese War Department intends to organize not less than eight cavalry divisions in its forthcoming reorganization of the army. This means a doubling of their present cavalry force.

Now, it is a well established fact that the Japanese have proved themselves to be an eminently practical people, and therefore, they are free of any suspicion of keeping an un-

*Translated from the German by Sergeant Harry Bell, Corps Engineers, U. S. Army.

necessary cavalry force, simply on account of tradition or for mere show. If they increase their cavalry, it is done under the conviction that their numerically inferior cavalry prevented them from reaping the fruits of their successes in the late war.

But a professional man should study the events of this war not merely for the purpose of finding arguments against a diminution of the cavalry arm. The sins of omission with their drastic consequences often offer more instructive lessons than the most brilliant feats of arms. Even if the tactics of cavalry on its open questions, receives no clear answer from the events of the Russo-Japanese War, it will enable us to gain fresh starting points from the results attained by the two other arms in that war.

Considering the present extended fronts of battles, their long duration and the artificial strengthening of positions, the battle efficiency of cavalry must be led into entirely different channels than heretofore. As the larger cavalry battles were not decisive, we have nothing by which we can decide the superiority of mass or group tactics, of saber or lance, but on the other hand, the outcome of several very interesting raids shows the principles which, if followed, leads to success.

Concerning the reconnaissance service of the cavalry of both sides, we have but the outlines of the whole campaign to go by. We cannot arrive at a clear judgment as to this until the respective parties speak out for themselves; before the respective General Staff of both armies throws more light on the many details concerning the service of information, etc.

Therefore we will limit ourselves in this paper, leaving aside all details which cannot now be substantiated, to the discussion of the following questions:

1. What *has* been done?
2. What *should* have been done?
3. On what grounds may we justify the sins of omission?
4. Have we taken the proper steps that *our* cavalry—if called on—will do better?

Only by a correct and complete answer to the last question will we be enabled to properly utilize the experiences of this campaign and fully appreciate our arm.

II. THE PERFORMANCES OF THE CAVALRY IN THE RUSSO-JAPANESE WAR.

(a) *The Russians.*

The very great respect which the Russian Empire commanded from all of Europe before the war with Japan, was based principally on its numerical fighting strength. But real experiences and facts showed that this respect had but a partial foundation in fact. Numerical strength played too much of a rôle; and it had been forgotten that in spite of its numerical superiority the Russian Empire had not been a shining example in the Crimea and in the war of 1877-78.

In the Crimean War, Russia was not able to save Sebastopol, and in the latter war it would have been defeated had it not been for the timely help of Roumania. The excellent qualities of their soldiery; their heroism, blind obedience, patriotism and physical endurance were outweighed by faulty leadership, by bad administration, and by the passiveness of the character of the entire population.

It cannot be denied, however, that Russia had in the years of peace from 1878 to 1904 rectified the faults which so glaringly appeared in their army administration during the Russo-Turkish War. The administration in Manchuria has been almost faultless.

But all their improvements and reforms have not been able to elevate the spirit and morale of their army sufficiently to gain superiority over an opponent like the Japanese.

The reasons why the moral peculiarities of the Russian army leave much to be desired are found deep in the whole system. It would prove too big an undertaking to explain them here. It will suffice for our purposes to state that lax discipline, fear of taking responsibility, rivalry and immorality in the higher leaders, lack of inspiration and of love of

battle throughout the army, are far more to blame for their defeat than the faults of the War Office.

Critics of the campaign have in most cases paid little attention to these psychological factors which laid heavy on Kuropatkin. This exceedingly able and educated general well knew the Japanese soldiers even before the outbreak of the war, and the great difference in the spirit in both armies was no secret to him from the very start.

The first battles, especially the taking of the heights of Kintschou, only served to strengthen his knowledge, and out of this knowledge of the inferiority of his own tools may well have sprung the lack of initiative and the hesitating conduct of the war.

Also in judging of the offensive spirit of the Russian cavalry leaders, we must never forget to take into consideration these psychological factors. The quintessence of wonder and respect accorded to Russia by all of Europe before the opening of the campaign referred especially to the Russian cavalry.

When about twenty years ago the political horizon was very cloudy, Germany and Austria saw in their mind's eye the frontier provinces overrun with innumerable hostile cavalry hordes. Even the highest military authorities were affected by this idea, and when the war clouds finally raised and dispersed the respect for this superior numerical force, its war organization, its fighting qualities, and the excellent material of the Russian cavalry, remained.

A few professional military men, however, saw deeper. They were not deceived by numbers on paper, by the bayonet charges of dismounted cavalry, by long distance marches over ice and snow and by the different equestrian feats of the Cossacks. The little importance to be attached in reality to the Cossack formation in modern war, the low grade of intelligence of officers and enlisted men of the cavalry, and the one sided education of the entire cavalry, was to them no secret.

Notwithstanding all this knowledge, these well informed authorities had no doubt that the weak and inferior Japanese cavalry would be easily defeated and that there would

then be no difficulty in the Russian cavalry divisions placing serious obstacles in the field in front of the advancing Japanese columns.

That the opposite has been proved to be the case, however, should not lead us to condemn the *entire* Russian cavalry without further ado. The contingent which was attached to the Manchurian field army (at Mukden, Kuropatkin had 149 squadrons and sotnias) seems to have been more than sufficient in quantity for the solution of all tasks falling to the cavalry. Considering the *quality*, however, not more than two-thirds of them should be considered.

In fact, but three regiments belonged to the regular cavalry (Guard and Dragoons) of which two, the Fifty-first and Fifty-second Dragoons, reached the theater of operations with the Seventeenth Army Corps only at the end of July, 1904, and the Fourth (Don) Cossack Division reached the army in the field only at the end of October, 1904.

The Orenburg, Ural and other Asiatic Cossack troops, which formed the main part of the Russian cavalry in Manchuria, consisted mostly of troops of the second and third draft, and the disappointment as to the results obtained by the Russian cavalry must be ascribed mainly to this irregular Cossack corps.

Even in foreign military circles it was no secret that the Don Cossack troops attached to the European cavalry divisions could be counted on to perform the duties expected of other cavalry only by half. And for years a scarcity of horses existed. The men called into active service, who were required to furnish their own mounts and arms, were known to be unable to do so, and the task of supplying mounts had therefore to be assumed by the government. So many difficulties had to be overcome in this that it left much to be desired, especially in mounting the second and third drafts, and for this reason the normal condition of cavalry was seldom if at all reached. The paucity of remounts, the insufficient pay, and the increased requirements of the service, were conducive in making the service exceedingly distasteful. This discontent throughout the Russian Empire reached to the steppes of the Don, Ural and the Volga.

Numbers failed to show up for enrollment, desertions were a common everyday occurrence in the Cossack regiments, and their officers were unfitted to raise the *esprit* of the men. Amongst all his comrades in the entire army of the Tzar the Cossack officer stands on the lowest step, morally and intellectually. He is but little superior to his men, and always remains in a patriarchal relation to them. He is entirely incapable of furnishing a shining example when placed in a difficult situation or in cases where self-sacrifice might be required.

In the very beginning of the campaign, the incapacity of the Cossack troops made itself felt, and the Russian government, to raise the quality of the officers, sent a number of cavalry officers of the Guard to the Cossack regiments. These latter officers were not lacking in intelligence, courage and initiative, but were deficient in knowledge of the customs of this service, and above all in knowledge of the peculiarities of their troops. Their appearance in the theater of war was, therefore, without any marked influence on the performances of the Russian cavalry.

Nowhere are improvisations of this kind as disastrous as in the cavalry. The cavalry should be on just the same footing in time of peace as it must be in war.

To the higher leaders, who had to take over the leadership of cavalry regiments or brigades more credit should be given than to their subordinate troops. General Rennenkampf had the making of an especially good cavalry general. If Mischtschenko and Ssamsonow had had better material, they would have stood in a better light. These generals had the confidence of their troops, it is true, but they knew their weaknesses too well to undertake independent, daring movements. The few strategic tasks given the cavalry by army headquarters were, however, carried out with precision. For instance, the guarding of the defiles in the Fonschuling Mountains against the armies of Kuroki and Nodzus; the protection of the flanks of the Russian army at Liao-Yang (Kuroki's change from one bank of the river to the other, and his attempt at an enveloping movement was reported in good time to Kuropatkin by the brigade of dragoons of the

Seventeenth Army Corps); and finally Rennenkampf's attempt against the extreme right wing of the Japanese at Boensihu in the battle at Yentai-Schaho.

What confidence the Russian commanding general had in the last named general is best illustrated by the fact that he appointed him, at Mukden, an independent commander, calling him in haste from the right to the left wing, when it was expected the Japanese attack would take place on that wing.

Considering the inefficient material of the Russian cavalry we should excuse its lack of activity.

The responsibility for the sins of omission—and that they were numerous cannot be disputed—rests not on the leader alone, but equally as much on the troops themselves. It is even now exceedingly difficult to give a correct and exhaustive answer to the interesting as well as important question, "Did the Russian cavalry do its entire duty in the service of security and information and reconnaissance?" Our own experiences in peace maneuvers should warn us not to give a premature or hasty decision. We cannot invariably accept foreign opinions or reports, before the Russian cavalry has had a chance to justify itself.

In so far as the Russian cavalry is concerned, it has to defend itself against an accusation brought by one high in authority. Kuropatkin, in an army order issued shortly after the battle of Liao-Yang, accuses the cavalry of "having left him in the dark at all times concerning the *intentions* and movements of the enemy."

A few critics, prejudiced by this and similar cases, have thought fit to throw the responsibility of the defeat at Mukden on the shoulders of the cavalry attached to the Russian west wing. It is charged with having failed to report the enveloping movement of the Third Japanese Army (General Nogi). Should this charge be true, it would be an inexcusable crime. The cavalry must have been blind not to have seen, in an open terrain, the march of three and a half infantry divisions, with numerous artillery. But to the honor of that cavalry, be it said, that this was not the case. On February 27th, that is one day after the commencement of the enveloping movement, the presence of strong Japanese

infantry at Tawan, on the Liaoho, was ascertained and reported by the Caucasian cavalry brigade. Cossack detachments also reported that Japanese cavalry had occupied Sinmintin, whereupon the combined Russian cavalry brigade (Buerger) was sent in that direction. So it will be seen that it is unjust to throw the blame of defeat on the cavalry of the Russian west wing.

Had Kuropatkin disposed of his forces differently and more to the point—a shorter front with strong reserves farther to the rear—it would have been easy for him, when he received notice of the movement, to have taken proper counter-measures in good time.

We are, however, of the opinion that the Russian commander-in-chief might and should have been served better by his cavalry. Not only the start of the enemy, but the earlier preparations of Nogi's command for the enveloping movement should have been discovered going on behind the left wing and reported to the Russian commander. The weakness of the Japanese cavalry and the insignificant depth of the Japanese front would have facilitated this task.

A strategical reconnaissance, as we understand it, with detachment and patrols far to the front for the purpose of carrying information, seems not to have been made either immediately before the battle of Mukden nor at any other time or place. But we cannot charge the Japanese with this sin of omission. The Japanese commanders were at all times kept well informed concerning the movements of the Russians. Laymen will persist in asserting that this was the result of a well established system of spies, but we believe that in this assumption the Japanese cavalry is unjustly treated. That single, more or less important reports were received through spies we admit, but to continually and thoroughly orient the commanders in the operations of the Russians would have been impossible by Chinese spies alone, for the latter would not have had sufficient intelligence for that. Such service cannot be rendered without possessing a thorough tactical understanding of the situation.

In performing their duties in the reconnaissance service,

the Japanese cavalry not only did their entire duty, but it also showed its intellectual peculiarities to the best advantage, while on the other hand, the results achieved in this line by the Cossacks did not amount to much, and on account of their low intellectual traits. Also, considering the strength of the cavalry on both sides in Manchuria, double blame attaches to the far superior Russian cavalry. First, because it saw too little in most cases, and second, that it did not prevent its weak opponent from observing their movements.

To guard against misunderstanding, we will state right here, and most emphatically, that we are not a believer in the so-called "screening" tactics which so many authorities persist in stating as the principal duties of the cavalry. Taken in its general sense, these duties are defensive and passive in character and entirely at variance with the spirit of our arm of the service. But besides all this, the placing of a thin cavalry screen to prevent the enemy from obtaining an insight into the movements of our troops, is a very delusive proceeding. An energetic and aggressive opponent can penetrate this thin screen without any trouble whatever. A screen can be of value only when it is actively connected with and supported by an energetic reconnoitering service. Whosoever advances into the hostile reconnoitering zone and attacks the closed cavalry bodies, wherever found, with success, gives at the same time the *coup de grace* to the entire message service of his opponent. The latter's patrols and detachments will then be of little use and in danger; for only in isolated cases will they be enabled to return to their commands, to say nothing of sending messages to them.

We may, however, find certain reasons and excuses for the Russian cavalry divisions in not having taken up an active screening policy. The mountainous, roadless terrain over a considerable part of the theater of operations, covered during many months with either mud or snow and ice, was little suited for an energetic, active undertaking. And the Japanese very seldom opposed the Russian cavalry with the saber, but invariably chose firearms for defense, supported by good positions, and almost always by their infantry in addition.

But in spite of this the Russian squadrons were strong enough to boldly attack a few companies or even battalions of the combined Japanese reconnoitering detachments.

Spaits, the Hungarian cavalry captain, says correctly in his highly interesting work "With the Cossacks in Manchuria:" "Besides being deficient in military education, the Russian cavalry lacked the will to sacrifice itself, and that was perhaps its greatest fault."

Furthermore the manner in which the Russian cavalry utilized the long intervals between operations bears witness to their lack of initiative, which should be the main characteristic of cavalry. Neither the great losses sustained in the three great battles, nor any other circumstances during the months of September, November and December, 1904, and April, May, June and July, 1905, can justify the inaction of the Russian cavalry.

Especially during the days after Liao Yang, when it might have been known or expected that great confusion obtained on the Japanese lines of communications and that there would be no danger of attack, it would seem that an extensive raid towards the railroad line Liao-ang-Haitschoen would have been in order. At that time the roads were fairly passable, although the crossing of the rivers, which were not yet frozen over, would have taken some time. In spite of this the raid, which was finally undertaken, would have given better results had it been made then when everything depended on celerity, instead of in January.

It is clear that Kuropatkin is partly to blame for this long inactivity of his cavalry squadrons. Even if the latter had no wish to take the initiative, he should have paid more attention to them. Of course, it was by General Kuropatkin's order that General Mischtschenko finally undertook his extensive raid, and the order for it was entirely correct in giving out general directions for this expedition into the country in rear of the Japanese army. The time of starting, as well as all details connected with this raid, were left to the discretion of General Mischtschenko, and he received all necessary assistance in the matter of troops, provisions, etc.

Sixty-six troops, five and two-thirds batteries, four ma-

chine gun detachments and four companies of mounted infantry, detailed from different infantry regiments, concentrated on January 8, 1905, at 1 P. M., at Sukudiapu, about fifteen miles southwest of Mukden, to undertake the raid under command of the above mentioned popular general. In addition, a detachment of sappers, a division bridge train and four troops of mounted frontier guards were attached. The best cavalry troops of the Russian Manchurian army, three Don Cossack and three dragoon regiments, were a part of this raiding force, a circumstance which must not be lost sight of in judging the results obtained by Mischtschenko.

The leader of every military operation must have a clear and definite object in view, which object he must strive to attain above all things. This also applies to cavalry raids, but with the difference that the cavalry should not always be tied down by hard and fast rules in obtaining the object in view. It should always be the aim of a cavalry raiding party to take the enemy by surprise and inflict the greatest possible damage on him. The "where" and "how" is of minor importance. If the raid does not succeed as laid down originally, then the leader's instructions should be so elastic as to allow him to proceed in some different way to attain his end. The main point is to appear most unexpectedly on either the enemy's flank or rear and to harass him there as much and as long as practicable.

We cannot say that General Mischtschenko was very successful in his raid, either in the planning of it or in carrying it out. His original plan was to attack the Japanese supply depot at Inkau. Since the harbor there was frozen over—which seems to have been unknown to the Russian cavalry general—the entire Japanese travel went via Dalny. The destruction of the railroad line, Port Arthur-Liaoyang, seemed to him but of secondary consideration. In this we think he was wrong, and the latter should have been his first objective, for that railroad was of the utmost importance to the Japanese, when we consider that just at that time Nogi's army used it in going north, and it was the only vulnerable point as far as the Japanese were concerned. Of course, the unfavorable condition of the terrain—roads covered with

sleet and ice and rough fields frozen hard—was to be regretted, but that could not be helped; General Mischtschenko should have taken all this into consideration and made his dispositions accordingly in order to hasten the advance of his troops. For this reason his taking along 1,600 burden bearers, carrying supplies and rations, was a grave mistake which proved disastrous in the end.

During a raid the cavalry should live off of the country, or better still, from supplies captured from the enemy. The former was feasible in the cultivated, rich country west of the Haitscheon-Liaoyang Railroad. A raiding column should never be accompanied by any wagons except those carrying ammunition. In spite of the fact that the Russian advance was delayed by small Chunchun bands and small Japanese detachments (one half a company, in trenches, delayed Mischtschenko's middle column—more than a division—three hours at Kiliho) and that the entire command traveled but about twenty miles per day, reaching Niuiyschwang only at noon on January 12th, the situation was not unfavorable.

It would have been entirely feasible to advance that day as far as Haitschoen, which was reported to be occupied by fifteen hundred Japanese with artillery and infantry. Eight thousand five hundred troopers with thirty-four guns should have undertaken an attack on this weak force. Should Haitschoen have then fallen into Russian hands and should all the railroad tracks and bridges there have been destroyed, then the raid would have been a success. Even if Mischtschenko had hesitated to attack the place on account of the losses entailed thereby, and the losses might have been considerable, his column should at least have advanced that day to different points on the railroad and have destroyed it.

Instead of this, the original plan, a detour towards Inkau, was taken up. The railroad depot there was taken by twelve dismounted troops, all of different regiments, and a few buildings and storehouses burned. In the meantime strong officers' patrols did some unimportant damage along the Inkau Daschitsao and Dashitsao-Haitschoen Railroads. These were all the results obtained by this immense cavalry

raiding force. The Russians did not dare to attack the village of Inkau in the dark, and the two reserve battalions of the Japanese army remained in undisturbed possession.

The sudden retreat of Mischtschenko, supposedly caused by the report of advancing hostile infantry columns, cannot be justified by any critic. In the open country there could be no fear of being cut off. Too little had been accomplished before leaving the hostile country. It is said (a foreign attaché who accompanied the raid is said to be authority for the statement) that General Mischtschenko intended to save his forces for the battle at Sandepu, and to return at the proper time for that purpose to his own camp. Such procrastinations are of no use and they only prevent the commander from throwing himself body and soul into his work.

Without any doubt, if we do not consider the excessive cold and the ice, the conditions were exceedingly favorable for the success of Mischtschenko's raid. An extended, vulnerable, weakly guarded line of communication lay in his front, and the road to it lay through an open, cultivated country which could have furnished easily his supplies. Defiles, which could have retarded his advance or endangered his retreat did not exist, and last but not least, the hostile cavalry was known to be a factor from which, considering Mischtschenko's strength, nothing was to be feared.

It is a great pity that this splendid chance to enhance the value of the cavalry arm was not better utilized.

Not only during the cessation of hostilities, but also during the days and weeks of the great battles, the Russian cavalry showed its lack of initiative, which we consider of first importance in the cavalry arm.

But a just critic must confess that existing circumstances made it very difficult for Kuropatkin's cavalry to play an active rôle as "battle cavalry." Yet, we do not fear to declare openly that, according to our view, even any other European cavalry—*based on the same maxims and conditions of our present cavalry tactics*—would hardly have been in position to make any better showing on the Manchurian battle-fields. Every sensible cavalry officer will admit the fact

that at the present time an attack against infantry in mass, *which is still in the hands of its leader*, is useless. In the Franco-Prussian War of 1870-71 a few such rides into the jaws of death were undertaken by the brigade of Bredow, the cuirassiers of Reichshoffen and the Division Margueritte at Sedan. But since the repeating rifle and bayonet controls the battlefield we cannot even think of undertaking such an attack. Only routed infantry, leaving their positions and running in panic from pursuing artillery fire are fair prey for pursuing cavalry.

As long as both battle lines are engaged with each other the cavalry is forced to respect the teachings of the modern battlefield. As in this war the Japanese infantry never compelled the Russian dragoons or Cossacks to flee in disorder, the cavalry, according to above maxims, could do nothing but perhaps seek to engage the hostile cavalry. This the Russian cavalry never successfully undertook, but whether through its own fault or not, we cannot at the present time say.

At Wafangku the Russian combined Division Simonow and the First Japanese Cavalry Brigade were opposed to each other on the same wing. At Liaoyang we find on the Russian west wing two and one-half cavalry divisions, those of Ssamsonow, Grekow and the brigade of Mischtschenko. It is remarkable that of these one, Ssamsonow's, was held far in the rear in the second line. But the cavalry commander, in spite of this, was enabled, had he so chosen, to concentrate the entire cavalry force for a combined effort on the 29th of August. How we think the cavalry should have acted then we will discuss later.

During the continuation of the campaign the Russian cavalry never again had such an opportunity to do something as the one of which it took no advantage at Liaoyang. Neither on the Schaho nor at Mukden did the dispositions made by general headquarters allow the cavalry to appear at any one point in such force. In both of these battles the cavalry was frittered away so that only an extraordinary and unusual efficiency of single cavalry leader would have enabled them to accomplish anything of importance.

In this manner we find in the advance on the Japanese positions in the beginning of October, 1904 (battle at Yentai-Schaho), the Orenburg Cossack Division of Grekow on the extreme right flank on the Liacho, the two brigades of Mischtschenko in the center of the connecting forces of General Mau, the Siberian Cossack division of Ssamsonow on the eastern wing under Stackelberg, and finally the Transbaikal Cossack Division, Rennenkampf's, with a mixed infantry brigade acting as an independent detachment to envelop the right Japanese wing on the upper Tai-tse-ho. Of the entire 149 squadrons of the Russian army no more than twenty-four were at any one point where they could have been used for a concentrated movement.

And furthermore the dispositions made by general headquarters at the battle of Mukden was just as faulty, as regards cavalry dispositions, as on the Schaho. There was, with the western detachment, at the beginning under Rennenkampf, only a nucleus of thirty-six troops, the Ural-Transbaikal Cossack Division and the Caucasian Cavalry Brigade. The remainder of the cavalry force was again dispersed along the entire front. The Seventeenth Army Corps in the center and the Third Siberian Corps on the left wing, each had strong cavalry forces, the reason for which is hard to determine. The former had the brigade of dragoons, the latter eighteen troops of Siberian Cossacks. Forty-one other squadrons we find scattered among the different infantry commands, and eighteen Cossack squadrons (Transbaikal) with Alexejew's detachment (later Rennenkampf's detachment). The entire Don Cossack division had been sent far to the north as a guard to the railroad and need not be considered in the battle of Mukden.

The thirty-six squadrons on the extreme right wing represented a force which should have made itself felt there, but after Rennenkampf was detached and sent to the Eastern detachment it appears that these thirty-six squadrons were led neither in a competent manner nor in conjunction with other troops. All we learn of them is that a weak Japanese force of sixteen troops steadily drove them back, and that this Japanese force was not prevented by them from taking

possession of Sinmintin or from attacking Buerger's brigade.

The conduct of the Russian cavalry at Mukden gives the general impression that it had suffered severely in its fighting qualities in the previous engagements and hardships, and the numerical strength of the squadrons, less than 100 sabers per squadron, which they had in this battle, seems to confirm that impression.

It is to be hoped that certain circles of our War Department may be warned from this not to underestimate the value of the tireless energy of our brave and competent squadron commanders in time of peace. That which these squadron commanders practice and preach, that is to say, order, discipline, well broken remounts, good horsemen, *esprit de corps* and love for their mounts, are the factors which in war guarantee the battle effect of the cavalry arm.

The Russian cavalry, with whose achievements in battle so much fault is found, has undoubtedly the right to ask us: "What should we have done?" The answer is easy and to the point: "By taking the offensive whenever required to cover its own army's flanks." A cavalry force consisting of several divisions, that much could have been concentrated at Liaoyang, at the Schaho and at Mukden, never should have remained inactive in one place and wait to see whether or not the enemy decides to attack the flank, which they are charged with protecting, or whether he decides on an enveloping movement or otherwise. In remaining inactive such a cavalry force degrades itself to a common battle patrol. In case the enemy does not appear, they have done nothing, but should he arrive, nothing is left the cavalry but to retire on account of his intact infantry masses. Therefore it would seem to be more proper to take the offensive and to solve the problem of guarding the flank by attacking the flank or rear of the opposing hostile wing. Of course this must be done by making proper detours of sufficient extent, and with sufficient "feelers" far to the front and sides. The main point is that the cavalry divisions to which are attached machine guns and horse batteries should be conscious of their power, and should disdain a constant touch with or support of the infantry. To cut entirely loose from

its base of supplies should not frighten the cavalry. Nogi's army operated at Mukden from ten to twelve days away from its base.

And this cutting loose is especially necessary in battle raids. Should the enemy plan an enveloping movement from the wing which the cavalry is charged with protecting or attacking, then our cavalry will meet him half way, and our headquarters will receive notification of the impending danger in sufficient time to make the proper dispositions. Our cavalry, ably led, will also find an opportunity to attack the hostile flank movement in its flank. This, in our opinion, the eighty to ninety Russian squadrons which could have been concentrated at Mukden, could have successfully carried through, and then it would have been the cavalry's duty to hang on like a bulldog to the left flank of the Japanese enveloping detachment and to obstruct in every possible manner its progress. Saber charges do not appear to be the best means to accomplish this, but rather should the cavalry utilize to the utmost its assistant means, machine guns and horse batteries, and by fully utilizing its mobility and the terrain, appear suddenly here and there, and especially whenever the fire action of the carbines, machine guns and horse batteries will produce the greatest effect. If once touch has been gained with the enemy he should never again be given any rest. To completely exhaust him, to hinder his progress, must be the purpose of the cavalry in its attacks.

Such a game as we have here outlined the Russian cavalry could have played with the Japanese, only, however, after they had completely defeated the Japanese cavalry. Considering the Russian numerical superiority that would not have been a difficult task.

It is self-evident that movements like we have indicated can only take place after the hostile cavalry has been completely routed, and this object should be our first aim. To attain this we cannot sit still, but must be continually on the move, watching for an opportunity to attack in close formation, and then to hit hard and vigorously.

Should the "battle-raid" of a cavalry corps not meet with

the enemy, then it must be extended as far as to the rear of the hostile battle front, going far around the flank. If thereby their reserve forces are compelled to go into action, part of the cavalry's task has been accomplished. Whenever they successfully reach the enemy's rear, the leader's highest qualities of coming to quick decisions and of correctly grasping the situation come into play. It is his province to determine when the moment has arrived to use his forces regardless of consequences. The general headquarters, in spite of a well organized message service, telephones, telegraphs, visual signaling, is enabled only in very rare cases to give proper directions or to orient him concerning the battle situation. Therefore in his isolated position, the cavalry commander's instinct must tell him when the proper time arrives for his interference. Should the result be against the enemy, then the latter's line of retreat is the goal to which our cavalry corps must give its entire attention.

In such a position was the Japanese cavalry placed towards the end of the battle at Mukden, on the evening of March 9, 1905. Its weakness through extreme fatigue and the break-down of horses prevented it from acting as it should have. We will later return to this interesting topic.

On the contrary, if the decision is in favor of the enemy, then it will be the duty of our cavalry—advanced to the rear of the enemy—to prevent or delay the hostile reserves from making our defeat more severe.

On August 31, 1904, between 7 and 8 o'clock P. M., the attack of the Second and Fourth Japanese Armies on the main fortifications of the line south of Liaoyang came to naught, although their last intact reserves, three reserve brigades, had been called into action. Decimated and entirely exhausted, the columns of Generals Oku and Nodzu had to retire to their own positions. We have seen above that it would have been an easy matter to concentrate a Russian cavalry corps of three divisions at the commencement of the battle on the extreme right wing. Had this cavalry corps utilized the days of the 28th to the 31st of August in reaching the railroad, say near the station Schaho, going

around far away from the Japanese flank, then it could have attacked the retreating Japanese. Whether or not a decided success would have been attained cannot now be discussed; but in any case it seems possible that an attack with the saber would have justified the attempt. Had the attack succeeded, then Oku could never have carried out his charge the succeeding night; and Kuroki's weak attempt to envelop the east wing would not have caused Kuropatkin to leave his south front and the Japanese would not have succeeded in taking Liaoyang.

In a similar manner, according to our conviction, in the latter phases of the battle on the Schaho, an intrepid Russian cavalry leader would have found many opportunities to attack the rear of the thin hostile line, the troops composing which were entirely exhausted through the long drawnout battle.

We do not insist, however, that the battle tactics of the Russian cavalry should have been carried out as portrayed by us above. For that, the details on hand are too meager. Concerning the "when," "where" and "how," is still open to discussion. But it is clear, however, that the large cavalry forces should have done *something* to take the brunt of battle off the infantry and artillery.

That this has not been done in a single case is to the discredit of Kuropatkin's cavalry. It was deficient in the spirit of sacrificing itself to duty. But by this we do not mean to say that only the rank and file is to blame, for the troops might have done their full duty. The disinclination to act independently, which was a characteristic of the entire cavalry in Eastern Asia, has its inception at the very head of the army and influenced all the operations of the cavalry.

There are a few shining exceptions to this rule of passiveness on the part of the Russian cavalry, and they are connected with the name of General Rennenkampf.

In the battle of Ventai-Schaho he led his detachment of twenty-four squadrons, sixteen battalions and eight batteries, with remarkable celerity through the mountain defiles towards the Japanese communications on the upper Taitse-ho. Energetically he attacked for days the hostile posi-

tions in front of Boensiku. The stubborn resistance of the opposing Japanese reserve brigades, supported by the cavalry brigade of Kanin, and the defeat of the remainder of the Russian columns finally forced him, in spite of his utmost efforts, to retreat.

Where he commanded something was being done at least.

After the engagement at Sandepu he replaced the wounded General Mischtschenko in the command of the Russian West Detachment.

In the middle of February, shortly before the battle of Mukden, he started on a raid to Liaoyang, in rear of the Japanese, with thirty-six squadrons at his disposition. Unfortunately no light has been thrown so far on the details of that undertaking. Most of the historians of the campaign are absolutely silent concerning this raid, and we derive our knowledge of it from the above mentioned work of Captain Spaits.

The cavalry of the West Detachment would undoubtedly have been favorably heard from had not *Rennenkampf* in the first phase of the Mukden tragedy been called suddenly to the East Detachment, which Kuropatkin thought in extreme danger.

Here also we soon perceive his active spirit. Immediately after his arrival the eighteen squadrons of Transbaikalian Cossacks displayed a remarkable activity in reconnoitering and in ascertaining the extended front of the Japanese line.

We must also mention the defense of the coal mines at Yentai in the battle of Liaoyang as a fine example of the activity of the Russian cavalry. The Siberian Cossacks of General Ssamsonow's command brought to a stand here the Japanese who were pursuing the defeated division of General Orlov.

These single spots of light on the dark background, which we have here emphasized to conclude our dreary account of the doings of the Russian cavalry in this campaign, may be augmented later by instances not yet known to us. But even then, the entire picture outlined here will not be materially changed thereby.

(b) The Japanese.

Not being supplied with sufficient means, the Japanese cavalry was confronted with great tasks in the East Asiatic War, and in spite of having used its best efforts in the solution of these problems, it was unable to entirely satisfy all critics, which, however, is only natural.

The foregoing report of the total fiasco of the cavalry arm in that campaign applies also to the Japanese cavalry. Too weak and too badly mounted to undertake brilliant feats of daring against the hostile cavalry or to overcome the hostile forces, it has had to be content with moderate successes. Therefore, its devotion to duty in the small engagements has been crowded into the background by the brilliant feats of the other arms of service of the Japanese armies.

We would remind the critics of the prophecies they made at the beginning of the campaign: "The weak Japanese cavalry force will be simply swept entirely off the face of the earth by the Russian cavalry;" and "The Japanese general headquarters will be thereby left in a bad situation. Reliable reports concerning the enemy will be lacking, and the Japanese communications in the rear will always be in danger of continued interruptions."

Nothing of the kind happened. The Japanese commanders were at all times exceedingly well informed concerning the movements of the Russians; its cavalry held the field, in spite of its weakness, always kept in touch with the enemy, and the lines of communications were always in absolute security.

In the first place, the inactivity of the Russian cavalry was responsible for the easy task which was laid out for the Japanese cavalry. But without competent and fearless leaders, operating as they were in the face of such a superior opponent, the Japanese cavalry never could have maintained such a remarkable reconnoitering service as it did. We have before emphasized the fact that, without doubt, the Japanese leaders had to thank its cavalry for the perfection of its information service, and not—as is generally supposed to be the case—the Chinese spies.

"Intelligence and contempt of death," says an eminent historian of the late war, Major Immanuel, of the Prussian General Staff, "are the attributes which are of the highest value to the soldier." The Japanese cavalry soldier possesses these attributes in their highest form, as does also his comrades of the other branches. And this is the reason why, in spite of faulty equipment, in spite of unsuitable, slow and badly gaited mounts, he has proved himself to be an excellent reconnoiterer and carrier of messages and reports.

Every Japanese company—therefore also every Japanese troop of cavalry—was imbued with the spirit to conquer, be the cost what it may. And this spirit does not permit of inaction, but on the contrary, requires a highly offensive character, and as we shall see, the latter has been carried to a high degree in the conduct of their cavalry.

It is earnestly hoped that we, who pride ourselves on our organization, education and remount material, will learn a lesson therefrom, and to foster the cultivation of the moral element and to neglect no opportunity to further the *esprit* of our men. For in the end, be it in a cavalry attack, in an infantry battle, or in an artillery duel, it is these factors which carry the day.

The specialist, who will take the pains to carefully study what the Japanese cavalry has done in small details, will feel regret that their cavalry was not better equipped in this campaign. Had this been the case, then, following the example of the Japanese infantry, it would have surely roused the dead principles of our cavalry battle tactics from their sleep. Then we also might be enabled to state with absolute certainty that, if wielded by a strong arm and a brave heart, the saber, like the bayonet, has not as yet played its rôle to the finish.

It seems passing strange that the originators of the Japanese army system, who may well be proud of their other labors, have been so niggardly in regard to their cavalry. Did they not see in advance that Japan within a few decades would have occasion to measure forces with an enemy who had strong masses of cavalry at his disposal, and that this trial would take place mainly in the level country of Man-

churia? Only by supposing that they did not foresee this, can we account for the reason of their not having a strong, well mounted cavalry force.

It is true that conditions in Japan are unfavorable for the employment of the cavalry arm. A mountainous country, without roads on the one hand, and on the other the plains entirely used for agricultural purposes, do not allow any freedom of movement for cavalry. The breeding of horses is also only in its infancy in that island. Not counting the difficulties in finding suitable grazing grounds, the strong salty land produces but a very poor green forage. Therefore the weak Japanese cavalry could not find a sufficient supply of remounts in its own country and had to content itself with the almost unsuitable ponies of Australia.

The creation of a strong and modern cavalry force will be a most difficult problem in the expansion of the Japanese war forces. But a solution to the question should be found in spite of all obstacles. The experiences of the battle of Mukden point clearly to that. In this battle the absence of a few cavalry divisions was the cause of their not reaping all the fruits of that victory, which the entirely exhausted infantry was unable to pluck.

A peace, as the Japanese people hoped and deserved, would then have been the result of an energetic cavalry pursuit. Eye witnesses of the fleeing mobs of the Second and Third Russian Army Corps will bear witness to this fact, amongst others Captain Spaits.

In the reorganization of its cavalry branch of the service, it would be advisable for the Japanese War Department to send a number of their cavalry officers to study the remount system of Austria, Germany and France. It is first necessary for them, before making practical experiments for the bettering of the Japanese remount system, to cross their home animals with other breeds. Without regard to expenditures, Japan should provide at once a suitable number of studs and stud farms, in order to raise not only the character but also the number of horses produced. Also, as it is true that the average Japanese soldier has little taste for riding, and on that account needs a special course of educa-

tion in it, Japan should not hesitate to obtain the services of a number of foreign cavalry officers as instructors.

In spite of single bold deeds, which the Japanese cavalry executed in the course of the campaign, it was deficient in the correct technique of the cavalry branch of the service. Long continued operations can only be performed with the help of the latter.

It is a pity that neither the Russians nor the Japanese kept records showing what became of their played-out horses. The loss of horseflesh in that campaign was very great, and for the reason that the Japanese cavalry took little care in saddling, bridling or grooming their mounts.

At the opening of the campaign Japan had at its disposition one cavalry regiment of the Guard and sixteen line regiments. The former was armed, in addition to the saber and carbine, with lances, which latter, however, had to be left at home. Each of the thirteen infantry divisions received, as divisional cavalry, one regiment of cavalry of three squadrons each. The line cavalry regiments Nos. 13, 14, 15 and 16, of four squadrons each, formed two independent cavalry brigades. In the battle of Mukden these were concentrated into one division, but before this they had been attached to different armies. The reserve infantry brigades, which were organized later, had attached to them but one reserve squadron.

Considering the great shortage of cavalry, the Japanese general headquarters made a mistake in assigning an entire cavalry regiment to each infantry division. It would have been preferable without any doubt to utilize but one or two troops for that purpose. Then there would have been enough cavalry to form, instead of but two, double that number of independent cavalry brigades, which, if then concentrated, would have been enabled to solve larger strategic or tactical problems.

In consequence of this arrangement the Japanese cavalry undertook, with weak forces, but a single raid at a distance, which, however, accomplished almost unbelievable results.

Shortly before the battle of Mukden two troops had the fortune to gain the rear of the Russian army and to partly

blow up the bridge of Guntshuling, although it was guarded by strong fortifications. Resting during the day and traveling at night, this small force reached, undetected, the vicinity of its object. To prevent detection by the guards at the head of the bridge, the troops dismounted to fight on foot, while a few selected troopers crept, in spite of the running ice, as far as the central bridge pier and fastened there the powder charge. When the latter exploded and a large part of the bridge flew into the air both troops disappeared in the darkness, and in spite of a hot pursuit by the enemy they returned unharmed to their own corps.

This daring deed caused such a panic at the Russian headquarters and Kuropatkin became so troubled about his communications in his rear that he ordered the reinforcement of the frontier guard detachments by an additional infantry brigade, the second of the Forty-first Division, as well as the entire Don Cossack division to guard the railroad leading to the north.

The daring deed of these two troops therefore caused the withdrawal during a decisive battle of about 8,000 men of the flower of the hostile troops! Indeed an excellent example to prove that the rôle of the cavalry in modern war is not yet played out!

Inasmuch as we have no reports about other raids of the Japanese cavalry, we will now turn to its performances in battle.

At the Yalu and in the storming of the heights near Kiutuscho it played no part.

On the other hand, the part taken by the first independent cavalry brigade, that of Major General Akijama, before and during the engagement at Wafankou is very instructive and interesting. As far as the meager data which we have at hand shows, the leadership of this brigade seems to have been excellent. It had been sent ahead from Pulantien by General Oku for reconnoitering purposes towards Wafankou, and there it, supported by two machine gun detachments and two battalions of infantry, carried to a successful issue an engagement with the combined Russian brigade of Ssamsonow, and here it engaged in a hand to hand conflict, so rare in

this campaign, in which the Cossacks are said to have behaved exceedingly well.

When a few days later General Akijama was forced to retire before the superior advance guard of the corps of Stackelberg, he retired in a southeasterly direction, but still keeping his touch with the enemy.

In the engagement at Wafankou, *acting on his own initiative*, he reached the battlefield at the right time to stop the attack of the Second Brigade of the Thirty-fifth Russian Infantry Division (Major General Glasko). By this he relieved the Third Japanese Division, which was in danger of being enveloped on the right by this brigade, and relieved it from a highly critical situation.

When the entire Russian east wing was forced by the results of the battle soon thereafter to retreat, the Japanese cavalry brigade pursued energetically and forced the hostile rear guard to evacuate its fortified position near Tsuitsjatun. All this was done dismounted and with very few casualties.

In the battle on the Schaho the second independent cavalry brigade, under Prince Kotohito-Kanin, assisted the weak reserve troops in repulsing the attack on Boensiku, which was undertaken by superior Russian forces under *Rennenkampf*.

At Sandepu the cavalry of Akijama defended that village for days against the hot attack of Russian infantry. It should be remarked that it there used explosive bullets as projectiles.

What the Japanese cavalry *actually* did at Mukden is insignificant compared with what it *could have* performed had it been stronger.

As conditions actually were, however, it should again be stated in the interest of justice, that the two independent cavalry brigades of Akijama and Tamura, combined into a weak cavalry division on the 3d of March, did their full and entire duty, considering their strength, in that decisive battle.

In the first phases of this long battle they advanced on the extreme left wing of the Japanese enveloping army with celerity and energy, driving the Russian cavalry of the west

detachment in their front. On the 27th of February, Tamura's brigade had reached already the west bank of the Liaoho at Takou, and its patrols spread out as far as Sinmintin. Through this the enemy received the erroneous impression or report that that place was occupied by strong Japanese forces. Kuropatkin then sent Buerger's brigade with eight battalions, one machine gun detachment and three batteries, together with the Ural-Transbaikal Cossack division of the west detachment, in all haste in that direction. This force, on its retreat from Sinmintin, was attacked on the 3d of March by the Japanese cavalry, which had been reinforced by two battalions, was defeated and cut off from its own army and driven northeastward.

On the same day the advanced troops of Oyama's cavalry reached the Mukden-Tjelin Railroad line.

From this time on, when apparently standing on the threshold of the greatest successes, its activity almost entirely ceased. The causes therefor are easily seen.

The one cavalry division felt itself too weak to cut entirely loose from Nogi's army, to which it had been attached, and to act on its own initiative far to the north against the Russian line of communications, and, in addition, Nogi, in his battle orders on the evening of the 3d of March, had expressly charged it with the protection of his left flank.

The Japanese enveloping movement, planned on a large scale but carried out with forces far too weak, resulted during the days from March 4th to March 9th in a series of bitter frontal attacks.

It is also *very probable* that the Japanese cavalry, finding itself too weak for the important task of harrying the hostile retreat, took part in the above named fights, dismounted and with the carbine. Who knows? There is nothing reported regarding it.

In any case it is certain that the main force of the Japanese cavalry did not get farther than Tasintun by March 10th, or about eighteen miles north of Mukden and six or seven miles west of the Mukden-Tjelin Railroad.

It is very remarkable that it never took the opportunity to fire, from a suitable position, on the retreating columns of

the Russians. The Japanese battery, which by a few well directed shots caused a panic in the Russian trains, *did not* belong to the cavalry division.

It therefore appears that the Japanese cavalry, like its infantry, had about reached the end of its resources by that time. What three to four well mounted, well led and well equipped Japanese cavalry divisions could have achieved at Mukden, even the most vivid imagination cannot predict. Even supposing that the troops detached north of Mukden—General Kuropatkin himself could not dispense with a single man in the last phases of the battle—would have been in a situation to oppose the taking of the defiles near Tjelin, then an energetic pursuit on parallel roads would have caused, without any doubt, the total rout of the Second and Third Russian armies.

The probable long duration of the battles of the future doubtless will furnish some moment, which if rightly grasped, will be favorable for the activity of the cavalry. The cavalry arm of the service will certainly be enabled to approach, saving its own strength for the final effort, that point where it intends to have a word to say in the decision.

With few exceptions the Japanese cavalry has performed all of its feats in the East Asiatic campaign with the carbine in hand and in close touch with its own infantry.

The reason for this is doubtless due to the important fact that even cavalry experts are slow in appreciating the value of their own arm.

"Victory is the main object," should be our motto under all circumstances. In case that cannot be achieved with the saber or lance, then the carbine should help out. It is only when we are too weak to gain a victory ourselves that we should gratefully accept the assistance of our infantry. The Japanese cavalry acted in accordance with this principle, and to blame it for this would be more than unjust. In addition, we should not forget that, on account of its inferiority, their opponents dictated its methods of battle.

Furthermore, the irresistible desire to attack, at a full gallop with the saber or lance, an enemy firing from good cover, only comes to that cavalryman who has an excellent

and well trained horse under him. Therefore, we should excuse the Japanese cavalrymen, with their slow and unsuitable ponies, that they showed no inclination to lay themselves liable to useless losses, and instead, following the enemy's example, dismounted to fight on foot with the carbine.

A typical example of the manner in which both cavalry branches fought with each other is had in the battle of Tschoendschu, in northern Corea, on March 28, 1904, the first engagement of the war.

Six troops of Mischtschenko's Cossack brigade had been sent from the Yalu towards Kasan to reconnoiter. As the vanguard of two troops approached, according to drill regulations, the town of Tschoendschu, which was surrounded with a masonry wall, it was suddenly fired upon. Both troops galloped to the rear to dismount behind a suitable rise in the terrain, to fight on foot. In the meantime, the drawn-up main body hastened to follow suit, and but one troop remained mounted as a reserve. In Tschoendschu a troop of cavalry and one company of infantry were quartered as a Japanese outpost, and while all this was going on the Japanese Guard cavalry regiment arrived as a support from Kasan. This latter regiment at once deployed two troops to fight on foot at the Lisiere of Tschoendschu. The third troop, endeavoring to ride around the town to prolong the skirmish line, was forced to retire by the fire of the Cossacks. After a desultory fire engagement, lasting about two hours, the Russians losing five officers and fifteen men, the Japanese three officers and seventeen men, there appeared a Japanese infantry battalion at double time.

General Mischtschenko thereupon breaks off the engagement and retires, unpursued, or only listlessly so, to his former position.

The action of both sides, in this first encounter, as far as concerns the cavalry, may well surprise us, for it is not at all in accordance with the spirit we are endeavoring to imbue into our cavalry. The strongly superior Russian cavalry, whose task it was to advance as far as possible into the hostile zone, should under no consideration have allowed

itself to be stopped at Tschoendschu. We will admit as correct, however, the dismounting of the two advance guard troops and their firing on foot, to give time for their "feelers" to reconnoiter the hostile position and the terrain. But the main body should not have hesitated a minute in trying to get around Tschoendschu, and as this place is not situated in a defile, that could have been easily done.

If the Russian main body had done this, it would have led to a combat with the Japanese Guard cavalry regiment behind Tschoendschu. The opportunity to ascertain the superiority of the cavalry by a decisive attack should be sought out under all circumstances in the first engagements of any campaign. The side which in doing this keeps the field will always have the confidence of its superiority thereafter as a mighty, moral factor.

It is more than probable that had the six troops of Cossacks gained a brilliant victory with the saber over the Japanese Guard cavalry regiment, the effect would have been to rouse the entire Russian cavalry to an offensive spirit.

The Japanese cavalry, according to our judgment, would also have acted more correctly had it taken advantage of the error committed by Mischtschenko in allowing himself to be engaged in a fire fight, and attacked mounted and with its entire strength, one of the hostile flanks.

Of course, the carrying out of this maneuver depended on the fact whether or not the terrain would allow on either side an approach under cover.

But as Tschoendschu is situated in a mountainous country, we may correctly assume that such was the case.

III. INFERENCES.

The course of the reconnaissance fight mentioned at the end of the foregoing chapter, causes us to ask:

"Considering the experiences of the latest campaign, what instinct of the cavalryman is the most correct? When meeting the enemy, should he put spurs to his horse, draw his saber and charge, or should he dismount and fire?"

The cavalry leader, as well as the rank and file, must be educated up to the one or the other in time of peace; and the officers must also be educated to think and reason, in order to curb, when necessary, their first impulse by judgment.

Our cavalry creed has not been altered in the least by the experiences of the East Asiatic War. As was the case before, so are we now of the opinion that the cavalry which prefers the charge to a fire fight will solve its task better than the one who holds the opposite opinion. The ideal condition would be possibly that the cavalry could do both equally well; that is, to be as well drilled in the use of the carbine as in the use of the saber and lance. But the attainment of this ideal seems to be almost entirely out of the question. Not only because of the short term of service of the men, which precludes the idea of making good foot soldiers and good horsemen out of a man at the same time, but also, and that before all, because the carbine and the saber are such entirely different masters that the cavalryman cannot serve both at the same time with the same loyalty.

An entirely different temperament is required to charge with drawn saber, than that for lying for hours under cover and firing.

So long as we lay more stress on good horsemanship and correct handling of the saber, and accord but second place to marksmanship, so long will we further the offensive spirit of our cavalry, and with that stands or falls the entire activity or usefulness of the cavalry branch of the service.

That this is true has been demonstrated in the late war by the Russian cavalry, which is well known to have given preference in time of peace to fighting with the carbine.

In any European war the first task of the cavalry will be to try conclusions with an equally strong hostile cavalry force. And only after the decision has been reached in this engagement will the victor be enabled to display an *effective* activity through reconnaissance, through raids against the hostile lines of communications, and through raids against the enemy's flank and rear. The decision in this cavalry battle will surely fall to that side which has the most offensive spirit.

A small cavalry detachment, seeking its safety in carbine fire, loses all desire to boldly charge the enemy. On the other hand, the highest advantage of the saber lies in the fact that just this desire to charge at all costs forms the "*conditio sine qua non*" for its use.

Good reconnaissance means to see as much as possible, and that can be performed only through a persistent seeking to gain contact with the enemy.

The Austro-Hungarian cavalry, according to our opinion, is especially well fitted to seek the charge in preference to fighting on foot on account of its traditions, its excellent horse flesh, and its excellent troopers, eminently fitted for mounted service. In spite of influential opposition, our drill methods still run in its old courses, and, according to our opinion, no change should be made on the whole. A few details might be changed, however. Without in the least lessening the education of horses and troopers we might do well, for example, to abolish most of our formal and obsolete drill in the riding hall and on the drill ground. Much time would be then gained for more important instruction. Saber drill is carried on with entirely too much pedantry. Riding with drawn saber for hours at a time is, to say the least, superfluous, as well as is the thrusting at dummies lying on the ground and the fencing on horseback with masks, in which latter exercise the horses take up more time than is profitable. Adeptness in handling the saber, vigor and confidence in the same, can be taught the trooper better on the ground. Given a good seat and a tractable horse, a very few lessons mounted will be sufficient to teach the use of the saber in the saddle.

To have a trooper, who has a bad seat, or who has an unmanageable horse under him, go for hours through the exercises of cut and thrust with drawn saber, will be found of absolutely no use. An obedient, manageable horse is the first requirement in any task, be it on patrol service, in the charge or on a raid.

The proper training of horses is and always will be without doubt the foremost consideration in the cavalry. Our cavalry strives to remain true to this maxim. And the good results attained in riding schools (remount schools) can be changed into *excellent* results if only one system would be used. This, however, is unfortunately not the case. Our drill regulations, famed for their lapidary brevity, are entirely too meager in their directions concerning the training of young horses. An appendix, in conformity with the latest remount science, is absolutely necessary.

The well grounded complaints over the ridiculously small numerical strength of our infantry companies in time of peace are continually getting more voluminous, but as far as the cavalry is concerned nothing is heard. This arm of the service, except horses for non-commissioned staff officers, is in time of peace at its war strength, and everybody thinks a troop commander is enabled to have field exercises with his men in their second and third year of service even in the winter time, as our regulations require. This would be highly desirable, were it so. Any one who, however, looks deeper into the matter will know that it is not true. Even under the most favorable circumstances a troop commander will have to use his utmost endeavors to get fifty men, not counting recruits, together for field exercises in the winter time. And that number is entirely inadequate for proper instruction in squadron drill. In the first place, there are not enough horses. From the number prescribed in regulations we must deduct sixty-four mounts for recruits, twenty not yet broken in, sixteen in the non-commissioned officers' school, with the engineer platoon and on other duties, say a total of 149. Sufficient men may be available to make the fifty mentioned above, because the total number is supposed to be 171. But as far as concerns the troopers there are al-

ways a large number, twenty-five to thirty in each troop, on different duties detached from their troops, a thing which is very injurious to the efficiency of our cavalry in time of war.

As soon as the subject of shortening the term of service to two years is brought under discussion in our assembly of lawmakers, the objection is made on the part of the military authorities that that term is too short for the proper education of the cavalryman. But any one going to the bottom of the thing will have to own up that we of the cavalry cannot now even count on a term of two years of actual practice. During the months from October to May the entire third year men are absent on detached service or on furlough; and every man in his second year will already have had a detail of some three months in the ordnance or staff. It is earnestly recommended that this detaching of men and horses in the cavalry service be stopped. Men of the reserve and horses of those on furlough should be used for detached service.

For service at the front at least seventy well drilled troopers should be on hand, as that is the least number with which a troop commander can do anything thoroughly in exercises in the field or in maneuvers. The detaching of troopers and horses simply leads to an excuse on the part of the squadron commander for having his exercises in the riding hall, letting his command hibernate in the riding hall, so to speak. Should the grounds for this excuse be removed, then the efficiency and capabilities of our cavalry in time of war would be materially increased.

Before the Russo-Japanese War, the possibility of a campaign in the winter time was laughed at, but now we will have to take that into consideration. What has been done in the icy fields of Manchuria can be done more easily in every European climate. Therefore the first thing now is to instruct in time of peace the men and horses with terrain and weather conditions in winter time. And that this is actually done the highest authorities should make it their business to see that all men are drilled not only in the riding hall in winter time but also in the open. And for that the simple patrol rides prescribed are insufficient. That our

cavalry, when it commences in earnest to train for a campaign in winter, should receive a proper and suitable uniform, which it has not at the present time, is self-evident. We will come back to this matter later on.

In the study of General Mischtschenko's great raid in the beginning of January, 1905, the question comes to us involuntarily: "How would a number of Austrian squadrons have stood the same test?"

Well, according to our views, the answer would be satisfactory, as the advance of our cavalry would have been made more quickly than that of the Russians in spite of ice and the frozen ploughed fields.

Our leaders would possibly also have recognized the objects in view quicker and better than General Mischtschenko. The promenade to the flank towards Inkon would not have taken place. Our engineers, ably supported by the main body, would certainly have destroyed the Daschitsao-Haitschoen Railroad, and that thoroughly. The advance of different Japanese infantry columns would hardly have caused our cavalry to retreat precipitately. Only on a single point we are undecided. How would our men and horses have stood the intense cold during the march and in bivouac in the winter nights in Manchuria? We are afraid, with our men unused to the extreme cold and illy clothed to withstand it, we would have had numerous cases of frost-bites and much sickness of the respiratory organs, and many of our horses would have refused the forage offered and have become useless.

It is very probable, therefore, that at Mukden our squadrons would have appeared in a worse condition than the Russians.

Could we make up our minds to renounce in time of peace the round croups and shining coats in winter time, then we might be in the situation to look ahead to a winter campaign without dismay.

The importance of instruction in field service has been fully acknowledged by our cavalry for a long time. But we are confined to certain limits in that on account of the ignorance of most of our troopers and a large portion of our non-

commissioned officers—although we strive to overcome this by a special thorough schooling of our younger officers in their duties of commanders of reconnaissance patrols. This is all very well, but this should also be extended to our reserve officers and cadets as well. And we act very much like the ostrich, when we consider that at the beginning of a campaign about half of our subalterns must be drawn from the reserves, and during the course of the campaign this will even be worse yet. These latter named officers serve their twenty-eight days mostly during the months of May and June, and during this period, when nothing is had but inspections, the troop commander has his hands too full to pay very much attention to these subalterns. It is no wonder, therefore, that he does not greet these "summer lieutenants" in a very hearty manner and does not pay as much attention to their instruction as he should. To prevent them from spoiling anything, they are allowed to simply trot along on the drill ground and to follow at their own sweet will behind the troop in field maneuvers—and this means a useless tormenting of costly horseflesh. Of course, exceptions to this rule are sometimes noted, in the case of especially well qualified reserve officers and when under conscientious troop commanders.

Only in sporadic cases do the reserve lieutenants and the cadets, when serving their time as one-year volunteers, obtain the command of independent patrols. This is a fault which leads to serious consequences in actual war. Our cavalry, which has but a limited number of intelligent non-commissioned officers, should strive to mould the reserve officers for the tasks of the reconnaissance service in actual war. The number of reserve officers now available will hardly ever be sufficient to fill the places of patrol and detachment commanders in the first days of a campaign.

To remedy this present condition it would be better to call the reserve officers and cadets as a rule into service only during maneuvers. Then our higher commanders could pay more attention to utilizing the services of these gentlemen.

It would be far better for a reserve lieutenant to ride badly in front and to lead a patrol correctly than vice versa.

It would also be better if every second year the duration of the maneuvers for cavalry should be increased from four to eight weeks, as is the case in Germany. This would not hurt any of our reserve cavalry officers financially, that is, not to any marked degree.

In addition to this, we would also recommend the division of our non-commissioned officers into two classes for reconnaissance service. For the first, the more intelligent, the theoretical education should be increased, and for the second, decreased. The latter cannot be trusted in any case with independent tasks.

The difficulties in cavalry reconnaissance do not consist in the art of correctly ascertaining and reporting, but rather in transmitting everything that comes to the patrol's knowledge quickly and securely to the commander.

According to the reports of the foreign observers attached to the Russian cavalry divisions the reconnaissance service was very badly performed. Not only that most reports were incomplete and often totally false, but a large majority of them never reached the commanding general. The Cossacks were greatly deficient in intelligence and partly so in the necessary discipline and devotion to duty. On the other hand, the Japanese carried on their reconnaissance and message service, as well as every other duty, with willingness and untiring devotion to duty.

Our cavalry service expends much time and care on the proper education of competent and trustworthy messengers. But in spite of this expenditure of care and time but few cavalry regiments succeed in educating any appreciable portion of their troopers in this important service. Anyone who is in a position to notice it, can easily see that during our maneuvers always the same two or three troopers in a troop are utilized as messengers; and should the messages be verbal that number is still smaller.

Modern infantry tacticians never tire in emphasizing the fact that the education of the skirmisher in independent action and thinking is the first and most important aim of his military education. And the cavalry has more reason to keep this fact always in mind. Any one cavalry trooper

may find himself in the situation of being separated by miles from his command, surrounded by the enemy, and carrying a message, on the timely receipt of which might hinge the entire campaign.

If the trooper is without the necessary intelligence, the best and most zealous instruction will not make a good messenger out of him. The sad experiences which the Russians suffered with their Cossacks, should be a warning to us and should cause us to pay more attention to the selection of our recruits for cavalry.

As long as the claim of our cavalry in having a voice in the selection of the recruits, is slighted, will the cavalry never be what it should. In time of war this will be felt.

Our drill regulations in the second part, which treats of dismounted fighting, begins with these words: "The utilization of the cavalry for fire action is exceptional."

With that we are fully in accord. On another page we have stated why, in spite of the experiences in the Russo-Japanese War, we still cling to the opinion that the saber is the main weapon of the cavalry.

But in spite of clinging to this principle, no thinking cavalryman will deny the fact that "exceptional use for the fire action of cavalry" will still be the order of the day in a future war.

A good cavalry must therefore have learned in time of peace to feel at home on the firing line. The command, "Dismount, to fight on foot," should not be considered as something unusual.

The Austro Hungarian cavalry drills with the traditional faithfulness that it employs in everything else, including the fighting on foot. Considering the time and labor expended in this direction it appears to us, however, that much remains to be desired. Many of our troops, so excellent in everything on horseback, display a certain clumsiness and helplessness as soon as the carbine comes into play, and this can be seen at target practice as well as in maneuvers. The main reason for this is to be found in the fact that the instructors, the officers, have not a sufficient knowledge of infantry fire action. As they are strangers to everything con-

cerning the infantry, they stick too closely to the letter of the drill regulations. And how can it be expected that our young officers should have a sufficient knowledge of rules and regulations of the modern infantry battle?

The graduates of the Neustadt Academy, studying for two years the practical conditions of infantry under competent instructors, can easily acquire this knowledge, but those assigned to the cavalry, as a rule, find it beneath their dignity to interest themselves in it, and they do not join with any perceptible knowledge of or ability to instruct in fire tactics.

In this respect conditions are even worse with the cadets and the one-year volunteers appointed as regular officers. They cannot acquire much information from their instructors who do not understand the matter themselves, and can only learn the most formal part of an infantryman's duties.

The course of instruction in the school of musketry, to which a few of the older cavalry officers are sent yearly, tends more to advance their knowledge theoretically than practically, and the training of the troopers in fire tactics is little benefited thereby.

In our opinion the best means to remedy this defect would be to attach a sufficient number of infantry officers and non-commissioned officers to the cavalry as instructors. This might be done in the afternoons, so that their respective commands would not lose the services of these officers and non-commissioned officers altogether.

This proposed arrangement ought to take place at two different periods—first for the separate instruction of recruits, and thereafter for the instruction of the troop as a whole.

It would also be best to have target practice in accordance with the infantry firing regulations. Devotion to duty and pride of our corps of officers will guarantee that the above described plan would have good results in a very few years, and that then the infantry instructors could be dispensed with.

Of course our drill regulations, in as far as they pertain to fire discipline, would have to be amended accordingly.

And they should be, as the experiences of the Russo-Japanese War are in direct opposition to our present regulations.

The most important lesson derived from the late war is that only a strong, well equipped cavalry command will be enabled to carry out all the duties falling to its lot. Theoretically, therefore, a demand for a considerable increase in our cavalry would be justified. The relative numbers of our cavalry to the other arms is less in our army than that in any other of the great powers.

But, considering the financial and political conditions of our Monarchy, any relief seems to be out of the question. We will, therefore, ascertain if other measures cannot be taken that will offset the inferior numerical strength of our cavalry.

In the first place we would recommend an organization of the cavalry which conforms more nearly to war conditions. The divisional cavalry in the Russo-Japanese War played less than a modest rôle; it did nothing worthy of mention, either on the part of the Russians or the Japanese. At most we see them on different occasions prolonging with a few guns the firing line of the infantry, as, for instance, in the engagement at Wafankou, where the Third Japanese Cavalry regiment was posted on the right wing of the Third Division.

The cavalry attached to the Japanese infantry in the battle of Liaoyang was employed in a most unusual manner. It was charged with cooking the meals for the infantry on the firing line and carrying them to the front. This was certainly a very practical, but to this branch of the service an entirely unsuitable employment.

However, we should not blame the cavalry for its inaction, because it was tied down to the limits of the long, intrenched battle fronts during the battles and could do nothing.

The cavalry will be able, in future, to display an activity as prescribed in our regulations only when employed with an infantry division fighting on the flank.

It does seem peculiar, however, that the divisional cav-

alry, which on both sides was kept so strong, could not have performed the duty of reconnaissance in the immediate vicinity without the support of other arms. For this support the Russians called on the mounted "Jagd commands" of the infantry regiments, and the Japanese reconnaissance service was performed by mixed infantry and cavalry detachments.

In the face of these facts we maintain that the Japanese committed a grave error in attaching an entire cavalry regiment to each infantry division. The small numerical strength of their available cavalry, fifty-five squadrons, did not justify such a lavishness. Had the Japanese commander attached but one-half of a regiment to each infantry division, there would have been enough left to form another independent cavalry division. That the presence of such a cavalry division at Mukden would have influenced to a remarkable extent the entire course of the engagement is without doubt.

In the strict sense of the word, there was no divisional cavalry in the Russian army. The different army corps had cavalry attached according to circumstances or caprice. For instance, at Mukden the Siberian Army Corps had attached six, the Seventeenth European Army Corps twelve, and the Third Siberian over eighteen squadrons. In this case, also, there was an inexcusable weakening of the independent cavalry.

The "*ordre de bataille*" of our army in the field has the same mistake with which we have just charged the Japanese commanding general. We, also, with our comparatively weak cavalry, have no reason whatever to fritter it away. Three squadrons for each infantry division means a superfluous luxury, which we cannot afford; for our five or six independent cavalry divisions are insufficient for the three to four field armies which we will have to organize in case of war. On the whole, we will have to furnish cavalry to fourteen army corps, not counting the Fifteenth, the Bosnian, for special reasons not far to seek.

One of our present cavalry regiments of six squadrons placed at the disposition of the corps commander, would be

entirely sufficient. This would give on an average two squadrons each for the forty-two regular and Landwehr infantry divisions, a saving of forty-two squadrons according to the requirements of our present "ordre de bataille."

We would then have 264 squadrons for the independent cavalry divisions. Of these we could form eleven divisions of twenty-four squadrons each, sufficient to give each army a cavalry corps of from two to three cavalry divisions.

Sooner or later we will have to come to it to form army corps similar to the French and Germans, of only two infantry divisions.

Hand in hand with this will then come the so much desired reorganization of our cavalry, the forming of regiments of four squadrons each.

In this manner eighty-seven regiments could be formed, of which twenty-one could be utilized as army corps cavalry and the remaining sixty-six as independent cavalry divisions. Whether to make the latter six or four regiments strong would be a matter of no importance, but the latter seems to us to be more logical.

Thereby we would have the imposing number of sixteen and one half cavalry divisions, and our cavalry could then certainly act independently.

Through the continued growth of modern armies the army corps has already taken the place of the division as the strategical unit, and therefore it will be seen that the reconnoitering forces should be attached to the former and not to the latter. Then should one of his infantry divisions receive an independent duty, be it advance guard, flank guard, etc., the corps commander has the means at hand to provide it with cavalry according to the necessity of the case. Under certain circumstances he may also attach to it the entire cavalry force at his disposition.

According to the custom at our maneuvers, the division cavalry forms a reservoir from which are drawn, in addition to the customary three message patrols, a number of smaller detachments for small infantry columns, as well as orderlies, messengers, etc., for all the higher commanders. Should anything remain after this frittering away, the cavalry is

entirely too weak to have much force for reconnaissance duty in the immediate vicinity. The small portion remaining can do nothing but trot in front of the infantry advance guard and to draw back on one of the flanks upon sighting the head of the advancing enemy and be a looker-on in the ensuing battle.

The army corps cavalry should be utilized in accordance with other principles. Holding it for its main duty of reconnaissance, with its entire force, it should be spared at other times. During a battle its insignificant fire action compared with infantry, would be called on only in cases of emergency. But the final crisis of the battle must find them ready to gather the fruits of the victory, hand in hand with the independent cavalry, or to prevent the hostile cavalry from turning our defeat into a rout.

No matter how much we may guard against having our corps cavalry frittered away on unimportant duties, we must admit that the infantry division cannot be left entirely without some cavalry for security, for orderlies and for messengers, but two troops of the staff cavalry ought to be sufficient for that purpose. And these might be augmented by cyclists, as the Prussian Colonel Gaedke advocates so persistently in the *Berlin Tageblatt*.

It would also be well if our higher infantry commanders would practice during peace maneuvers husbanding the cavalry placed at their disposition. At the present time the divisional cavalry is being used at a rate which, in case of war, would mean its entire disorganization within a very few days. If in future wars our independent cavalry should play the important, active and independent rôle for which it is created, then our peace organization should be modified as follows:

1. That in time of peace the cavalry divisions are organized just as they would be in war.
2. That the horse batteries should be numerically increased accordingly.
3. That one machine gun detachment of four guns each be attached to each division.

We might add that in case of mobilization it would be best, as far as the cavalry is concerned, to avoid the creation of new organizations or formations, for in time of war each and every cavalry leader will find himself in a situation where he has to trust subordinate commands with independent duties; it is, therefore, of the utmost importance that he should thoroughly know his subordinates, not only their abilities, but also their character.

The transferring, *en masse*, of guard and line cavalry officers to the Cossack regiments, was especially deplorable in the Russo-Japanese War.

As Austria has but eight horse battery divisions of twelve guns each, an additional organization of eleven cavalry divisions would necessitate an additional six horse battery. Twelve guns are considered the minimum with which a cavalry division can properly carry out its tasks.

No time should be lost in organizing from eleven to sixteen additional machine gun detachments. The opinion of all experts who have had an opportunity to observe the results obtained from the use of this new arm, is that machine guns are especially suited to increase the fighting strength of troops, but only in case where the troops are familiar with their tactical use. The correct placing of the machine guns in the very beginning of an engagement is especially of importance and an art of leadership, as it will be difficult to change their position during the battle. Also, as the number of men serving the machine guns must always be very limited, it would be well for all cavalymen to be able to handle them in case of necessity. It is, therefore, essential that in time of peace the cavalry should be instructed in their proper use. Up to the present time, but a few of our cavalry regiments have had that opportunity during maneuvers.

It is evident that the planning of larger maneuvers should give the cavalry leaders an opportunity to familiarize themselves with the tactics of battle raids. The short duration of our yearly maneuvers is a serious drawback in this respect. The slow deployment of the modern battle masses lasting for days is an absolute essential preliminary to the carrying out of our tactical problems. Therefore, in peace maneuvers

we, as a rule, will have to be satisfied with simply outlining the more extensive movements, and in any case we will have to omit our present passive manner of carrying out the movements for the protection of the flanks. That we are on a fair way to do this already is proved by the activity displayed by our two Silesian cavalry divisions in the last Imperial maneuvers.

If there is an actual spirit of enterprise animating our leaders, there will be no difficulty in directing it into the right channels.

We, as well as our German allies, will have to discontinue making certain attacks in mass "for the relief of our infantry" against victoriously advancing hostile infantry, but they are executed in maneuvers anyway only as a spectacular affair. The well known Prussian authority, Colonel Gaedke, is fighting with all his might against this practice, which in time of war can only lead to disaster.

We are far from expecting the cavalry to be afraid of losses in action; but when we consider the difficulty of recruiting proper and competent material in time of war, it would seem to be right and proper for the cavalry to strive in all its engagements to proportion its losses to the chances of obtaining recruits and also to the results to be achieved. In this regard entirely too much attention was paid to saving our forces in our past wars.

The small losses sustained in the Russo-Japanese War by the cavalry, compared with infantry losses, should be a cause for shame to the cavalry leaders concerned. Any body of cavalry which has a true conception of its duties will get into situations in any war where it must not be afraid of the greatest sacrifices. And this will always be the case there where it is of great importance to gain an insight into the hostile country. Because nothing can be seen without going near to the enemy, it is of the utmost importance to carefully avoid everything which will lead to a premature discovery, and this fact should lead to reforms in our cavalry armament and uniform. Especially should we Austrians not deceive ourselves and admit that the equipment and

uniform of our cavalry is flashy, very visible, and of very little practical use.

The red riding breeches, the hussar jackets, with their glaring trimmings, the light blue ulankas and coats, covered with the most conspicuous trimmings, the shining dragoon helmets, the polished saber scabbards, the gold belts of the officers, all these are not what we ought to have in war.

The Japanese cavalry took the field with red riding breeches and red trimmed coats, but before very long they were forced to cover that red color with khaki colored overalls.

We Austrians should not cling to tradition as an excuse for our colored cavalry uniform. Our War Department broke all traditions after 1866, by changing the old historic white coat of the infantry in which, as is well known, the infantry never went into field in any case, as well as the uniform of the cuirassiers, and the tasteful uniform of the hussars and uhlans. No time should now be lost in introducing khaki or gray colored field uniforms, with almost invisible rank designations. Everything leading to the identification of officers at long distance should be abolished. A patrol, getting under hostile fire, should not run the danger of losing its leader at the first fire.

In place of the clumsy dragoon helmets, shakos and impracticable hussar head coverings, which in any case would soon lose their shape and brilliancy in campaign, a simple felt hat should be adopted. All bright buttons, buckles, etc., should be replaced by dull bronzed ones.

The heavy riding boots, which after a few wet marches and bivouacs can be drawn on with but great difficulty, should give place to lace shoes and suitable leggins; and box spurs should be replaced by spurs with straps.

For winter campaigns fur coats reaching to the knee, arctic overshoes, fur gauntlets and fur caps with earlaps, should be adopted.

We will lessen the disgust our young comrades may feel over the picture we have drawn by stating that for garrison use a nobby uniform should be retained. For in military

questions especial attention must be paid to the psychological factor; human weaknesses must be respected. Of the Austrian cavalry officer is especially so much expected that we must pardon the little vanity he shows in his uniform.

A nobby and fine uniform will compensate the young men for many hardships, and will give them self-respect, which is very conducive in fostering the desire to forge to the front in battle. And the common cavalry officer, whose lot in time of peace is harder and more disagreeable than that of his brother infantry officer, deserves a uniform in which he can show off on occasions.

Therefore it would be best to retain our present parade and street cavalry uniform, but the field uniform described above should be acquired as soon as practicable. It is to be regretted that experiments with such a field uniform have been made in all branches of our service except the cavalry. The same conditions apply to Germany. Any one who has seen in their maneuvers the white belts, the shining coats and helmets, and the burnished equipment of the cavalry, can only wish them the good luck never to be compelled to take the field in that uniform.

Also, in striving to lessen the visibility of the cavalry, we should not forget to banish the white horse from our troops. Any one who has ever led a patrol can easily remember how easily he saw at a long distance the white horses of the enemy's patrol or troop, showing him the proper direction to take, and enabling him to send back excellent reports. We should not make it so easy for the enemy. Austria and Hungary are rich enough in horse flesh to banish the white horse forever from its cavalry service.

In spite of its inferior numerical strength and inferior equipment the Japanese cavalry did its entire duty, and because of its excellent *esprit*. This should be a warning to us, who look with a certain degree of self-satisfaction on the tactical and technical advantages possessed by our cavalry. May we never, considering our brilliant achievements in time of peace, underestimate the value of the moral element and neglect to foster it. The largest part of our men are imbued with a healthy *esprit*, not yet affected by temporal

or national conditions; and the spirit of those soldierly virtues which religion and ethics imbued in the Japanese soldier can be developed into a large part, if not all, of our army. Our corps of officers should at all times be able to perform this high duty. Clean morals, a devotion to duty and a love of the profession should never diminish.

It cannot be denied that this requirement is easy to exact but hard to conform to. The present situations and material conditions of the officer are to-day little suited to cause him to be the champion of a rapidly disappearing ideal.

Of this our higher leaders of the old school should not lose sight. They should consider it one of their main duties to lighten, in so far as the interest of the service permits, the struggle for existence of the younger officers. Slavish submissiveness should not be required of subordinates, but instead a cheerful obedience.

He who in time of peace cowardly renounces his own convictions will never strive in time of war for responsibility, that attribute of each and every cavalry officer.

The overwhelming with drudgery of which our subalterns and even our troop commanders needlessly suffer on account of red tape, uses up their best powers, narrows their horizon of view, makes them downhearted and incompetent for coming to independent decisions.

Only officers educated on a liberal and broad minded basis will make competent instructors for our rank and file.

The old military truth "What is not continually inspected will not be practiced," can in a certain sense be applied also in the psychological sphere. The spirit animating a cavalry troop should count for more in the eyes of the troop commander than its purely military performances.

Of course it is not easy in time of peace to designate definite points from which to judge the moral value of a troop.

A commander who is somewhat of a psychologist and who has his heart in the right spot will have no trouble in coming to a correct solution in this regard.

Regimental commanders should first of all strive to lead the moral education of their troops into the right channel.

A colonel without good temperament and without a warm heart is, in our opinion, out of place, however excellent a soldier he may be in other respects. Unfortunately the highest authorities do not seem to coincide with this view in many cases.

Officers of the General Staff, who have nothing to do but be "good soldiers," are not infrequently appointed to the important command of a regiment. Concerning the expression "good soldier," an erroneous opinion has sprung up during our long period of peace. Any one who finds himself at home under all conditions, who never bothers the higher authorities, who guesses the intentions of his superiors and carries them out with fanaticism, is called that. Should, then, such a "good soldier" be appointed colonel, he at once requires the same blind obedience which he has practiced. Laurels at inspection are his highest dreams. A self-consciousness of having done the best with the means at hand he does not understand or appreciate; to gain approval of the powers above is the main thing, causes him to do everything his own way, and brings his subordinates to the verge of despair. And soon the latter perform their duties unwillingly and mechanically instead of with pleasure and devotion. The spirit of the corps of officers retrogrades and all better elements disappear. That, however, does not seem to be material to the martinet colonel, as long as the entire day is consumed in duty; as long as everything goes according to his dictates, the *esprit* is of little importance. He has no decided rule of conduct concerning his manner of thought and action. All he thinks of is "What will the General or His Excellence say?"

If we have portrayed conditions to emphasize the evil in too high a color, there is one fact which we cannot deny, and that is that many excellent men, especially suited for good cavalry leaders, retire as troop commanders. The ideal they looked for and strove to attain in their service did not materialize. Sooner than find their individuality forced into prescribed forms, they went their ways. Our friend, the "red tape" colonel, will, however, dismiss this

fact with the platitude "nobody is unreplaceable." But to that we take exception.

The Russian cavalry, for instance, had very few leaders who knew how to combine intelligence, tactical knowledge and desire to accomplish something with the moral courage of taking responsibility. Should our turn come it is questionable whether we would have a better record in this respect.

The commanders of large infantry forces will be able in future to lead very comfortable physical existences in the field. Even the fatigues of days of battle will not be hard on them, as a rule. Far more than ever heretofore they will be confined to certain places behind the firing line.

It is different with the cavalry leader. Carriages and portable houses of wood or asbestos are not for him. He has to share physical exertions with the youngest recruit, and then have all his wits about him. It is therefore a necessity, though a hard rule, to call a halt on the older captains, who have lost their physical elasticity during the long years of service as troop commanders, and compel them to retire when they attain the rank of major.

Another question is, whether or not we should expose our best cavalry experts to the danger of exhausting their physical strength during long years of weary waiting for promotion. To this we answer emphatically, "No!"

And this should teach us of the cavalry officers' corps to unremittingly care for and foster the physical and moral qualities so necessary to a cavalry leader; and if we succeed in this we need have no fear as to the future, for our tools are good.

NOTE.—Since the above translation was made here, and the paper was in the hands of the printer, an English translation in book form has been received. A review of it will be found under the head of Book Reviews.

THE STUDY OF LAW AT THE SCHOOL OF THE LINE.

INTRODUCTORY LECTURE GIVEN TO OFFICERS OF THE SCHOOL OF THE LINE.

BY CAPTAIN HERBERT A. WHITE, ELEVENTH CAVALRY,
SENIOR INSTRUCTOR.

“**A**S every citizen is interested in the preservation of the laws, it is incumbent upon every man to be acquainted with those at least with which he is immediately concerned, lest he incur the censure, as well as the inconvenience, of living in society without knowing the obligations which it lays him under. And thus much may suffice for persons of inferior condition, who have neither time nor capacity to enlarge their views beyond that contracted sphere in which they are appointed to move. But those on whom nature and fortune have bestowed more abilities and greater leisure, cannot be so easily excused. These advantages are given them, not for the benefit of themselves only, but also of the public, and yet they cannot, in any scene of life, discharge properly their duty, either to the public or themselves, without some degree of knowledge in the laws.*

“There is no branch of knowledge so essential to the proper discharge of the various duties of a citizen. This is especially true with respect to American citizens, whose high prerogative it is, by virtue of the doctrine of suffrage, to have a direct and personal participation in all public affairs. Surely, that man is not fit to be the maker or the guardian of laws who has never been educated in their first

* Blackstone, b. 1, p. 6.

principles. But apart from public and patriotic consideration, self-interest should induce every man to understand his own rights and obligations. This proposition is almost too clear to need enforcement. As the subjects of law, certainly, if not as the makers, all ought to know enough to avoid its penalties and reap its benefits. Unquestionably on the score of practical utility no kind of knowledge can stand higher, for it comes into immediate application almost every hour we live."*

As for a knowledge of law on the part of military officers, that one of us who passes through a day without feeling a need of a knowledge of his powers and the methods of procedure thereunder, is certainly not passing through a day of ordinary military experience. Any officer who is not absolutely sure of his ground, at least in all matters of ordinary routine, is a curse to himself, a burden to his superiors, and a menace to his profession. No one will gainsay the statement of Blackstone that "a person of liberal education should possess at least some knowledge of that science which is to be the guardian of his natural rights and the rule of his civil conduct." It requires only the slightest reflection to comprehend the vast importance of some knowledge of this science on the part of army officers who, in the last extremity, are to be the defenders of these very rights and judges of the rules of civil conduct.

Why have we an army? Simply to defend our institutions. And an army not imbued with a fervent love for the institutions for which it is contending becomes nothing but a body of mercenaries, to be defeated by the first patriotic force with which it comes in contact. Properly to appreciate and love our institutions we must possess some knowledge of them and the laws which support them, for it is hard to be in love with an object with which we are unacquainted.

The Law Department is far from saying that our officers are unfamiliar with our institutions and laws. But to say that we can be too well acquainted with them, as officers practically say when voicing the old statement, "There is too

* Walker, p. 2.

much law in the army," is a queer comment from reasonable men. That such ideas exist is a matter of astonishment and concern. Fortunately the War Department considers that a carefully prepared course laid out for the instruction of selected officers would be woefully deficient if no notice were taken of our relations to our body politic, the perpetuation of whose existence is the reason of the army's being.

It would appear to one unfamiliar with our system of jurisprudence that to gain a knowledge of our institutions nothing could be better than a study of our Federal Constitution. A knowledge of this instrument should familiarize us with the spirit of our institutions, not only with our Federal but with our State institutions as well, for the State governments are each similar to the Federal. But it should be remembered that our Constitution is but a law, and like every law, to be understood must be interpreted by the aid of the lamp of legal knowledge. Thoroughly to understand our great instrument we must become acquainted with legal terms and language else we shall read much with but imperfect understanding.

But there is another consideration yet more important in the question of gaining a knowledge of our law. If you have never given the matter any serious thought or study you may be under the impression that most, if not all, of our laws will be found in our constitutions and statutes and treaties. But in nothing could you be more mistaken. The greater part of the law of this country will be found in no constitution, in no statute book, in no treaty whatever. This discrepancy between our judicial theory and practice is somewhat amazing. Nevertheless it exists. And the fact that the Federal government is said to possess no common law and the fact that many of our States have adopted codes do not render less imperative a grounding knowledge in our common or customary law.

Of course our time is so limited that only the hastiest glance can be given to this subject of the common law. The study of the common law is hardly anything less than a study of our race itself. And if a liberal education is required anywhere, it must be from the students of the law,

for "the sparks of all the sciences in the world are raked up in the ashes of the law."* It is apparent what task devolves upon those who essay to give a short course to army officers upon this subject.

"The general expectation of so numerous and respectable a body as the student officers that are continually passing through this institution, the importance of the duty required from this department, must unavoidably be productive of great apprehension in those who have the honor to be instructors therein. We cannot but be sensible how much will depend upon our conduct in the infancy of this study of the civil law by our officers, for it is still but three years since this course was authorized by the War Department. Law is a study that has generally been reputed of a dry and unfruitful nature, and it is one in which the methods of theoretical elementary instruction are yet sources of contention in our law schools. We cannot but reflect that if either the plan of instruction be crude and injudicious, or the execution of it be lame and superficial, it will cast a damp upon the further progress of this most useful and rational branch of learning; and may defeat for a time the wise design of those whose influence and farsightedness succeeded in placing this study in our curriculum."†

Furthermore, any officer attempting to give instruction in civil law must necessarily feel his limitations in the lack of practice such as comes to the ordinary attorney. This is a difficulty that can be overcome by instructors in this department only by unwearied effort in keeping touch with all that is in progress in the civilian world. It shall certainly be our constant aim by diligence and attention to atone for this serious defect, esteeming that the best offer we can make for your favorable opinion will be our tireless endeavors in some little degree to deserve it.

We expect that officers of the experience now appearing at this institution know their Davis and Winthrop. Life is too short to again go over these works. The course at this institution should be an amplification and not a repetition of

* Bacon.

† Adapted from Blackstone.

what an officer already knows. So we shall present to you the broad field of law in general that you may more properly appreciate the place military and martial law occupy in the whole grand scheme of Anglo-Saxon jurisprudence. To study military, martial, international and constitutional law without a proper groundwork in the elementary principles of law is not unlike looking at a few stones in a large building with no view whatever of the entire structure and with no idea of the relations existing between these few stones and the whole edifice. When once you have a view of the entire structure, realize its proportions and purposes, you will then, and not till then, be in a position to understand the objects of the separate elements of which it is composed.

Consequently we start the course with a short study of elementary law. We can give you, of course, but an outline. We must work so rapidly that we can hit only the high places, leaving to your own lesiure and inclination the time when you will descend into the valleys fruitful with learning. But we trust this hurried glance will be sufficient to enable you to fill in the details with future study.

The course in elementary law comprises a study of law in general; the sources of law; common and civil; the classification, municipal, international, military and martial; written and unwritten law; government and its functions, National and State; equity; persons; property, real and personal; estates; domestic relations; contracts; torts; remedies, courts and procedure; and judicial references.

Military law is essentially criminal law, so that a study of criminal law as conducted here is but an extension of what has always been taught in our military text-books. The nature of crimes is investigated, and explanation is given of the objects and ends of criminal procedure. It is appropriate to mention here the necessity of keeping our army procedure and punishments in consonance with those that the spirit of our people demand for themselves. "Popular beliefs change often in the course of time, not by force of reason so much as because of their incongruity with the spirit of the age. Our general intellectual tendencies create new attractions and new antipathies, and eventually cause

as absolute a rejection of certain old opinions as could be produced by the most cogent and definite arguments."* As the ideas of people change in regard to crime, so must we change our methods of army discipline. We can no longer keep men on a barrel from reveille to retreat or cause them to pack logs for hours around a ring, as in the past. Our army comes voluntarily from the people, and we can have no abnormal system of justice in it. We necessarily must keep in touch with the beliefs of our people as regards the punishment of crime and the methods of determining guilt.

It is true that the people are not always right, especially in regard to matters with which they are not fully conversant. It is to be regretted that our people do not fully realize the enormity of the crime of desertion. If they did, few deserters could escape detection and capture. But we are confronted with conditions and not theories, and we must do the best we can, realizing that no abnormality of procedure or punishment will be tolerated by the American people in any of their institutions.

All this is true regarding the law of evidence. While we are not strictly bound in our military procedure by the common law rules of evidence, yet these rules are our guide, and must not be departed from except for most excellent reasons. Hence naturally flows the study of the common law rules of evidence at this school, a subject that heretofore has not received from military men the study commensurate with its importance. Moreover, as evidence is procedure, we can here introduce instruction in any and all branches of the law. As you proceed in your study of this subject you will understand our whole scheme of instruction and realize fully that all our teaching of the civil law tends to but one end, such a knowledge of the law that we can understandingly emphasize military features.

The course in criminal law comprises a study of the classification of crimes; mental element in crimes; persons capable of committing crimes; offenses against persons, property, health and morals, public peace and the government.

* Lecky.

The course in evidence comprises a study of the history of our laws of evidence; judicial notice; law and fact; burden of proof; presumptions; admissions; confessions; character; opinion; hearsay; witnesses; examination of witnesses; writings.

Moot courts are also introduced exemplifying the procedure of military tribunals, including commissions and provost courts; preparation of forms employed in military jurisprudence, motions, pleas, depositions, etc. These are given near the end of the course, and are intended to test the knowledge of student officers as gained in the past, amplified by the course here.

Arrangements have been made for the following lectures to be given during the course. No study of lectures is required:

"The Jury." By Mr. John H. Atwood, counsel for Private Grafton before the United States Supreme Court.

"The Dilatoriness of the Law." By Judge J. H. Gillpatrick, of the Kansas bench.

"Federal and State Courts." By Mr. Nathaniel Guernsey, of the Iowa bar.

And if possible the lecture of Judge Webb, of Atchison, Kansas, on "The Trials of Christ" before the Jewish Sanhedrim and before Pontius Pilate.

This completes the instruction for the first year. The Staff College work in law consists in exhaustive study of constitutional law, martial law and military government. The work in these studies is made very complete in order to fit officers for the various duties they are called upon to perform. It has aptly been stated that we are to-day largely an army of pacification,* and as such the problems we are called upon to solve require quite an extensive legal knowledge. From the short course here in civil law we feel assured that student officers will be fairly well equipped to meet the new requirements that the last few years have imposed upon army officers.

*Lieutenant Colonel R. L. Bullard in *Military Service Institution*, July, 1907.

The system of instruction is that known as the quiz system. A certain number of subjects covered by the text book is given out for each lesson. The various points in the lesson are pointed out by the instructor, and then members of the class are questioned over the whole lesson. By this means students are not at a loss to understand the main features and the important parts of each lesson. It has always been a stumbling block to the students of the law to know, in their reading, what parts are more important than others. By this method students soon come to see from the quizzes what are the important parts and what are less important. What the quizzes have developed into are really conferences between the student officers and the instructor. And the term, conferences, is now being used by our universities in place of quizzes. Officers may ask questions at any time, and they should do so if there is anything that arises during a quiz that they do not grasp. But you are cautioned against needless questions or those that slight study would enable you to answer yourselves. Every class has its public nuisance, and it would be a noted exception if this one should find itself minus that individual. Everyone should remember that in asking questions during the quizzes he is taking up time; and it may be the matter he asks about is clear to the other members of the class and it is a waste of time to have them all listening to something they already understand. Questions may be asked of the instructors after the conferences are over if you feel that you want further information and yet are fearful of taking up the time of the class. No markings are given on the daily conferences. Examinations are given at the end of each subject, and partial examinations are given in each subject some time during the course in that subject. The system of marking will be explained to you later. Suffice to say at this point that no paper is marked by itself, except in the case of deficiency. Each question is marked through all the papers before another question is taken up. That is, Question No. 1 is marked through the papers of all the student officers before going on to Question No. 2. This allows of comparison such as could be obtained in no other manner. When the papers

have all thus been marked, the marks are totaled, but not before.

It has been remarked that it seems peculiar that international law has been given no place in our curriculum. As has before been stated, any course given here should be an amplification of what an officer already knows. Officers reporting here for the courses are presumed to be familiar with the elementary work on the subject of international law, written by the present Judge Advocate General, Geo. B. Davis. An amplification of this would require considerable time, and that is what is not given us. Moreover we do study the laws of war under the subjects of martial law and military government.

It is the opinion of the present head of the department that the importance of international law does not warrant any alteration of the present course. The department is in hearty accord with the views lately expressed by our Secretary of State in his paper on "The Need of a Popular Understanding of International Law." Mr. Root points out "that now the governments are controlled by the people oftener than the people by the government; that one of the chief obstacles to peaceable adjustments of international controversies is the violent condemnation of an arbitrator by his own people if he yield any part of their demands, whether such part is lawful or not."

Public enlightenment on any question is to be wished for, and the more intelligent people become the less violent they are apt to be in the matter of their rights before they have fully studied the questions concerning them. But this institution is not a propaganda for general information. It is purely technical in character, and has for its object only the giving of such information as will be immediately useful to an officer in the performance of his duties. And international law is not as immediately useful as any subject in the course.

International law is quite as much an academic study as a legal one. Some of our law schools do not include this subject in their curriculums and many pay but little attention to it. This is no reason why we should not have it, if

it were as necessary to us as some of the subjects we do study, yet it shows that the subject is not considered important in legal knowledge.

International law is mainly a study of history, and a very discouraging one at that, to a lover of justice. No men more than military men, especially those of much service, would more gladly herald the approach of eternal peace. But as long as men take the redress of personal grievances into their own hands, as is daily witnessed in the many cases of the so-called "unwritten law," it takes a dreamer to come to a conclusion that the dawn of international justice and eternal peace is *comparatively* any nearer us than it was a thousand years ago.

We are far from decrying the great good that has come to the world from the adoption of the rules and regulations governing international intercourse. We are not insensible to the lessening of the number of wars since international trade took on such enormous proportions. And certainly some good, however little it may appear, must result from such meetings as the Hague conferences. But large armies and strong navies are to-day, and will be for years and years to come, stronger guarantees of peace than all the international law rules that have arisen since the civilization of man took form.

The department has prepared a small pamphlet that will be of value to officers that in the future care to take up the interesting study of international law. During the course here similarities and analogies between municipal and international law are frequently called to the attention of the student officers, but beyond this our time does not warrant us in going with this subject.

And now, finally, as to the method of study. We are all aware of criticisms of this school that are made by officers, most of the critics being unfamiliar with the present system. The greatest fault of Leavenworth, it is said, is that it is a speck school. This criticism has reached such a point that we are almost led to despise a mind that can memorize anything. However, such criticism must have some good points or it would have died long ago. The *parrot system* of educa-

tion, or attempt at education, cannot be too strongly condemned. This department has been laboring for three years to eliminate any and all methods whereby a person may gain recognition unless he possess a practical working knowledge of the subjects covered in the course. If any department could be excused for having a system where booking would be prominent it would be the law department. For law is a book study in the sense that most of it will be found in books.

But I wish to call your attention to a distinction that is invariably missed by the critics of this school. Accuracy is not speck. And while the department cares nothing about the latter, it most strongly insists on the former. There can be no successful men in our present work-a-day world that are not accurate men. And if the law department at this institution could do nothing more than impress upon student officers the need of accuracy in all their professional work it could well stand upon that record. We hear caviling at red tape in the army. But if every report made, if every communication submitted, if every return rendered, was correct when it left its place of origin, the red tape, the paper work of the army, would be so decreased that most of our system would stand a model in place of a target.

And so while we care nothing for the words of any book, we insist that principles be so understood that there may remain nothing for an accurate mind to do but apply these principles to controversies that arise.

In your study of the law, at first, you will be beset with doubts and misgivings. You will find yourselves probably in the condition of the blind man looking in a dark cellar for a black hat that isn't there. You will call a veritable fool that man who said, "Law is the pride of the human intellect and the collected wisdom of ages." And you will hurl anathemas at Blackstone for saying, "Law is a science which employs in its theory the noblest faculties of the soul, and exerts in its practice the cardinal virtues of the heart; a science which is universal in its use and extent, accommodated to each individual, yet comprehending the whole community." Yet such language cannot be deemed extravagant.

For municipal law is indeed the grand regulator of human affairs. "Its functions may be appropriately compared to those of gravitation. If you could imagine even a momentary suspension of that great law which regulated the universe of matter, keeping the minutest particle, as well as the mightiest mass, in its proper condition, the stupendous confusion that would thence result, and which we designate by the fearful name of chaos, you would have strong but faithful illustration of that social disorder which would as certainly result from the suspension of municipal law, and which we designate by the hardly less fearful name of anarchy."*

A clear conception of the grandeur of law will make us better officers, and when once we all realize it the bogie of militarism will or should disappear from the American people.

It is true that the work here crams the student officer. Not in the sense of speck, but so much is gone over, such a hurried view is given that, kaleidoscopic-like, but little remains. But we can get no more time, and we believe more good comes from the present system than from any other that could be adopted. And we make you acquainted with the methods of finding the law, which is after all the great desideratum.

In spite of all the ground we cover, we do not expect you to work yourselves to death. But I may say that you will be considerably disappointed if you look for entertainment without the expense of attention. But an attention not greater than that usually bestowed in learning the rudiments of any other science. But you must dearly earn what you obtain. "Genius, without toil, may, to some extent distinguish a man elsewhere; but here he must labor or he cannot succeed. No quickness of invention can supply the place of patient investigation. A clear mind might determine at once what the law ought to be, but actual inspection alone can determine what the law is. You must make up your minds to hard work. Weigh well the fact, that 'to

*Walker, p. 5.

scorn delights and live laborious days' is the indispensable condition of professional eminence. On somewhat easier terms you may prepare yourself for the ordinary routine officer; but nothing short of resolute, emulous, persevering study can raise you to that height which alone should satisfy a generous ambition."*

* Adapted from Walker.

MEMORANDUM: THE ADAPTATION OF ARMY
REGULATIONS TO THE ADMINISTRATION OF
THE BRIGADE POST OF CAMP STOTSSENBERG,
PAMPANGA, P. I.

THE Army Regulations outline a strict rule of procedure for administration of small posts with all modern conveniences within the United States, and in time of peace. In times of war their requirements must be met as far as possible or practicable under the circumstances; but there arise many military necessities and emergencies which require immediate action which must not be delayed for any cause.

Now that the government is concentrating large bodies of troops in posts, the requirements of Army Regulations adapted to the administration of small commands must be modified and liberally construed in their application, otherwise the time of the commanding generals of these brigade posts will be so taken up with unimportant administrative details that no time will be left them for the important work of instructing and maneuvering their commands on advanced lines and seeing to their military efficiency and preparedness for actual field service.

It is believed that there is nothing in the following pages that violates any army regulation, but that the adaptation of Army Regulations, as suggested within and as is now in operation in the brigade post of Camp Stotsenburg, is for the best interests of the service for large commands from all points of view.

1. As far as possible the details of administration and instruction will be left to subordinate commanders, to whom they properly belong. Post headquarters will deal with

regiments and detachments or separate battalions, through their respective commanding officers. Those commanders will be given latitude in carrying out existing orders for drilling and instructing their commands, but the post commander will, by frequent inspections, see that the results are in all respects satisfactory, and where organizations are found delinquent or lax the commander of the regiment or detached or separate battalion concerned will be held strictly responsible.

2. Leave of absence, under the provisions of Par. 49, Army Regulations, will be granted by the post commander upon approved applications forwarded through military channels. In view of the irregular hours of departure and arrival of Manila trains the following decision will govern in the case of officers going to Manila by verbal permission:

"Regimental commanders, the commanding officer Sixth Battalion, Field Artillery, and the surgeon may, in their discretion, give officers of their respective commands permission to leave the post on one day, returning the next. Such absences will not be counted as leaves, and officers so absent will be shown as present on all morning reports. All officers leaving the post four hours or more, under whatever authority, will register their departure and return, with authority for their absences, on the register at post headquarters."

3. Companies of intact regiments will be considered under the control of their respective regimental commanders in reference to the latter's authority to grant "furloughs in the prescribed form for periods of one month." (Par. 104, A. R.)

4. Under Article XIX of the regulations, the action ordered to be taken by the commanding officer will be taken by the commanding officer of the regiment or detached battalion to which the deserter belongs or by which or in which he is apprehended. These same commanders may send enlisted men in pursuit of a deserter when no expense is involved. In no case, however, are subordinate commanders competent to issue orders which involves issues to be made, or expense incurred by post staff officers. This prohibition is general.

5. Under the provisions of Par. 201, A. R., regimental commanders and the commanding officer Sixth Battalion, F. A., and the surgeon will make frequent inspections of the buildings used by enlisted men of their commands. A post order requires that weekly inspections of the post be made by a medical officer accompanied by the post police officer. Subordinate commanders will remedy promptly any irregularities or unsanitary conditions brought to their attention as a result of these inspections. The commanding general of the post will inspect various buildings from time to time, especially where irregularities have been observed or reported.

6. Post exchange councils for the various authorized branches of the post exchange will be ordered as required by regulations and the necessities of the service, in orders from this office. The roster for these councils will be kept at the headquarters to which they pertain and the proceedings will be forwarded to this office for approval, through the respective regimental or detached battalion commander.

7. The attention of regimental commanders is called to the inspections ordered to be made by them in Par. 328, A. R. The company fund accounts of the batteries and the hospital will be made as required by the post commander.

8. All bakeries, whatever their location in the garrison, will be under the post treasurer, and the baking of bread, etc., for the entire command will be under his supervision. The post treasurer is authorized to make use of all bakeries and divide his work among them as may best meet the necessities of the case.

9. Newspapers and periodicals have been estimated for, for the coming fiscal year, to be addressed to organizations as follows: Third Cavalry, First Infantry (including Sixth Battalion, F. A.), Second Infantry. The commanding officers concerned will arrange for reading rooms or tents in their respective commands.

10. The report called for in Par. 351, A. R., will be rendered for each branch of the post exchange, and through the channels prescribed in Par. 6 of this memorandum.

11. Guards will be turned out for their respective "commanding officers." All guards will be turned out for the "commanding general." When a colonel commands the post all guards will be turned out for him as "commanding officer."

12. The commanding officers of regiments or detached battalions will refer requests for surveys arising in their commands to surveying officers appointed by them. The same commanders will approve or disapprove the reports of survey so submitted. If the amount involved exceeds \$500.00, all copies will be forwarded to this office. If the amount involved is less than \$500.00, two copies will be furnished the accountable officer and the third forwarded to this office. Requests for surveys by post staff officers, and in any casual cases will be made to this office.

13. General Orders No. 191, series 1905, War Department, will be followed strictly in correspondence between this office and the post staff offices of record. In connection with the above cited order this office will keep a suspended file of all communications received here, whether recorded or not, but which are to come back with some action taken.

14. Copies of all Regimental, General and Special Orders and circulars, and the orders of detached battalions will be furnished these headquarters as soon as they are published.

15. The muster of regiments and detached battalions will be by the commanders thereof. The surgeon will muster the detachment of the hospital corps, and the post adjutant will muster the post non-commissioned staff. The details of each formation for review and muster will be published in orders from these headquarters.

16. Complete efficiency reports will be forwarded to these headquarters by regimental commanders and commanders of detached battalions for every commissioned officer on duty under them on June 30th. The surgeon will furnish complete reports in the case of each commissioned medical officer on duty under his supervision on June 30th. The commanding general will make out these reports only in the case of regimental and detached battalion commanders,

the surgeon, and any casual officers or any staff officers not otherwise reported upon. He will add any remarks he may deem proper in forwarding all reports by endorsement.

17. A general order of the director of posts of the Philippine Islands, published pursuant to an act of the Philippine Commission, required that all official mail matter be stamped with the department, bureau or post from which it is mailed.

18. Under the provisions of 1, Par. 849, A. R., each regiment will have a recruiting officer appointed by the commander thereof. A post recruiting officer will act on all other cases arising in the command. General Orders No. 54, series 1905, Philippine Division, directs that: "Recruiting officers will submit *direct* to these headquarters, immediately upon the enlistment or reenlistment of any man (Philippine Scouts excepted), a written report, giving the date and place of enlistment, the organization for which enlisted; by whom enlisted; organizations previously served in, and the period of service in each, with dates; also date of arrival in the Philippine Islands."

19. The commanding officer of the post is the only officer having power to place officers in arrest, except as provided in the 24th Article of War.

20. Charges and specifications will be forwarded to this office complete, including compliance with Paragraph 962, A. R., and General Orders No. 8, c. s., Headquarters Department of Luzon.

21. Summary court cases arising in the post will be disposed of as follows: Regimental commanders will refer all cases arising in their regiments to the summary court officer appointed by them for their regiment. All cases arising in the Sixth Battalion, Field Artillery, detachment hospital corps, and all casual cases will be referred from these headquarters to the post summary court for trial.

22. Papers forwarded to these headquarters, such as clothing schedules, requisitions for stationery, etc., calling for issues to be made by the quartermaster, will not be prepared for the signature of the commanding general, but after he

has signified his approval of same they will be approved by his command and signed by the adjutant. All such papers will be approved by the respective regimental commanders or detached battalion commander before being forwarded to this office.

23. Ration returns will not be prepared for the signature of the commanding general. When he has signified his approval of same they will be approved by his command and signed by the adjutant. They will always be examined and approved by subordinate commanders before being forwarded to this office.

24. Pay rolls will be completed by regimental commanders and the commanders of detached battalions, and the surgeon as the commanding officer of the detachment of the hospital corps. They will be forwarded by the same commanders direct to the chief paymaster of the department.

25. All dealings with the medical department of the post will be through the "surgeon" as the commander of a distinct detachment.

26. Regimental commander, commanders of detached battalions and the surgeon will take final action on all passes submitted to them. They will also make proper arrangements for having reports of departure and return on passes properly made.

27. Whenever the permanent commander of the post is to be absent for one week or more, the senior colonel commanding during his absence will be carried on detached service from his regiment, the next senior commanding the same, and thus leaving the post commander free and unhampered to see to the proper administration of the post as a whole. Under no circumstances will the headquarters of any regiment be combined in any way with post headquarters.

Respectfully submitted,

GEO. VAN HORN MOSELEY,

Captain Fifth Cavalry,

Adjutant.

HEADQUARTERS CAMP STOTSENBURG.
PAMPANGA, P. I., June 6, 1906.

The foregoing memorandum is approved and will govern in the administration of affairs of this command. Any communications that may be issued from time to time modifying or amending the above will be attached to or filed with these papers.

J. M. LEE,
Brigadier General, U. S. Army,
Commanding.

THE SABER.

BY CAPTAIN G. B. PRITCHARD, FIFTH CAVALRY.

"Are we thoroughly proficient in its use and is there any room or need for improvement?"

THE weapons of the cavalryman in our service are the carbine, the pistol and the saber. In order to insure proficiency and readiness in the use of the carbine, we have sighting and aiming drills, gallery practice, instruction practice (ball cartridge), and finally record practice, where the details of the individual records of each shot of each man are made of record and preserved, so that the standing of each man in the organization and of the organization as a whole, are expressed mathematically for present information of those concerned in comparing their progress with that of competitors, and for future use as a basis for further improvement, or perhaps as a cause for discharge for disability because of the hopelessness of the soldiers ever being of any use to the government in one of the most important of all the qualities necessary to make a fighting man.

To further stimulate interest, to encourage effort and to reward success in this most desirable accomplishment, we have the division and army competitions, where medals and prizes are awarded and the results of these competitions, as well as those of the record shooting previously referred to, of each organization are published in general orders each year.

In reference to the pistol a very similar procedure is adopted and carried out.

Thus for the two shooting weapons we have a systematic progressive and detailed course of instruction, culminating in the most important feature of all, a test of ability con-

ducted so as to promote competition, rivalry and a desire to excel, capped with rewards for success.

And the results with both these weapons have, wherever the course of instruction was conscientiously carried out by interested and competent officers, been highly satisfactory.

But what of the saber? We have heard much discussion in the past as to the relative merits of the saber and the pistol, and even a hint or two as to the advisability of doing away with the former; but this is not the question under discussion. We have the saber with us, a distinctive weapon of the cavalry branch, and, whatever the purpose or design of the weapon, whatever the wisdom or folly of its adoption as part of our armament, it must be admitted that a lack of knowledge of the weapon and how to use it is, if true, a serious defect, which cannot be remedied too soon, for the saber in the hands of an uninstructed man is like a razor in the hands of an infant—extremely dangerous.

Now I maintain at the outset that our cavalry (by which I mean our average cavalry organizations) is not proficient with the saber; that the average trooper in our service cannot use his saber with the amount of effectiveness he should possess, and control his horse at the same time; that the saber is handled more like a cudgel, held with a death-like grip, with little or no dexterity and suppleness and with little regard, when swinging this three-foot knife from the back of a horse, for the changing center of gravity of the combined animal, man and weapon. In speaking of our "average" cavalry organizations, we must, of course, eliminate the troops at Riley, Leavenworth, Myer and Jefferson Barracks, where crack drillery and show is part of the program and where proficiency and even excellence in saber exercises are attained by a great deal of effort, not *because* of the system but *in spite* of it.

I further maintain that, whilst our troopers undoubtedly have the brawn and eye for strongly propelled, accurately aimed blows and correctly directed thrusts, they would in a *mêlée* be inferior to a foe whose training in suppleness, dexterity and (what are natural accompaniments) speed and

agility would enable them to save their strength and win by skill over a useless output of muscular energy.

The subject of the use of the saber on horseback (for that is almost its sole use) is so intimately connected with or dependent upon good and proper horsemanship that the discussion of the two must go hand in hand.

But before taking up the subject along this line let us see how the course of instruction and practice with the saber, as laid down in our regulations, and as required by orders, compares with the courses and the standards required for the carbine and pistol.

First we have in the Drill Regulations, "School of the Soldier," a "manual of the saber" and a "saber exercise," then the "fencing exercise," one paragraph on "fencing mounted," and one paragraph on "mounted combat." In the "School of the Trooper" we have "Manual of the Saber Mounted," which adapts the "Manual" and the "Saber Exercise" dismounted to mounted use.

Then we have the "Running at Heads" (two paragraphs). So far so good. The foregoing covers the ground, but much of it contains some wide generalities. There is no course laid down on which each man is to be tested and qualified, no system of scoring, no record of proficiency of each trooper or organization for comparison with other troopers or organizations, no stimulus for each man to excel, no rewards, no prizes no special privileges, and the natural result, no excellence.

Can it be, I would ask, that it is thought impracticable to devise a standard test of excellence with this weapon which, when applied to each trooper and organization, will insure thoroughness of instruction, throw out in bold relief the deficient and into corresponding prominence the distinguished, and thus show us where "we are at," where others "are at," and possibly why we are not somewhere else?

In answer to this it may be claimed: First, that it is impossible to get up a system of scoring for this course; second, that we have enough to do in the cavalry already and that we cannot stand the additional work with its details, reports, paper work, etc.; third, that the saber is

seldom if ever used, and that we are proficient enough already with the arm for all practical purposes.

To the first I would say in rebuttal that a system of scoring is neither impossible nor difficult, as I will endeavor later to show; to the second, that instead of having more work we will have less, for the reason that we will have a definite goal to work for, which will increase the interest of officers and men.

In contrast to this, we have at present a conglomeration of drills in the saber exercise, mounted and dismounted, in order to get in the number of hours required in department orders.

I have seen these drills in many troops, which, from a calisthenic point of view were highly successful, nearly every man in the troop with the saber lying limply on the left arm at the "port," but grasping the gripe with his hand jamb up against the guard, in an embrace so precious and so tenacious that it would seem he had been told that his adversary's object was to pull the weapon out of his hand by main force, and that only death should ever separate him from his vice-like grip.

With this grip such movements as "right point," "tierce point," "right cut" are almost impossible. The instructor meanwhile oblivious or negligent of this error in a first principle, pumps out the commands, and the sabers move promptly and with tremendous force, the imaginary enemy being literally cut to pieces by the beautifully executed cuts, thrusts and parries.

In other words we are now drilling in our service with the saber, and at the end of each season we have advanced to the "*ne plus ultra*" point, having learned the alphabet and the small vocabulary, so to speak, but are unable to express a single idea in a well formed sentence. Is it any wonder that there is a lack of interest, after repeating this old performance each season! Now we have some work—no results.

The plan suggested means more work (perhaps), but surely gratifying results. In the latter case we have a

bigger balance to our credit than in the first; would not the latter be better?

In answer to the third rejoinder of our being sufficiently proficient with a seldom used weapon, I can only say that in time of peace we are preparing for war.

We will not always have the Filipinos to fight on foot with our carbines alone; we are a world power, and the saber must be more effective in the hands of our cavalry than in the hands of that of any other country, if we are to keep the American cavalry where it belongs, above all other cavalry in the world.

The plan I suggest is as follows, and to be convinced of its impracticability, I must needs see it given a fair, systematic, unbiased trial.

A certain number of things to do with a saber to be arranged in consecutive order a fixed distance apart on a straightaway course. The length of the course, therefore, to be definitely known in feet. The runner must make the run and take the objects indicated in the prescribed manner in a given time regulated by a stop watch; and a fixed value being given to each object, a fixed value can be arrived at for his total, and also for the totals of the several runs made.

The paraphernalia for the objects to be furnished by the Quartermaster's or other department, to be strong in construction and material, accurate and uniform in dimensions, and to be furnished just as our small arms silhouettes are provided for carbine and pistol; a season to be set aside for the practice each year, and reports of the scores made to be rendered, showing the work done.

Starting from the "scratch," fifteen yards in front of where the troopers are lined up, let there be at each fifteen yard point beyond:

First. "Against infantry, right cut." A stuffed leather head eight inches high, six inches in diameter, resting on ground in center of a square piece of board eight inches on side. To be taken as indicated. To count 4.

Second. "Against infantry, left cut." Same as to right. To count 6.

Third. "Quarte point." An iron ring three inches in diameter covered with chamois placed edge across track on a horizontal iron bar bent one and one-half inches away from runner to hold ring, other end of iron bar bent downward ten inches into hole in top of post on right of track to allow full swing of bar, post to be six feet high. Ring to be taken in "quarte point." To count 2.

Fourth. "Left cut." Piece of wood of general shape and size of man's head, of soft wood, supported by wooden pin of soft material about three-quarter inch in diameter, nine inches long; pin to be inserted three inches in bottom of head and sinking three inches into post, leaving three inches exposed, to be cut by sharp edge of runner's saber, head post to be six feet six inches high, placed on left of track. To be taken as indicated. To count 3.

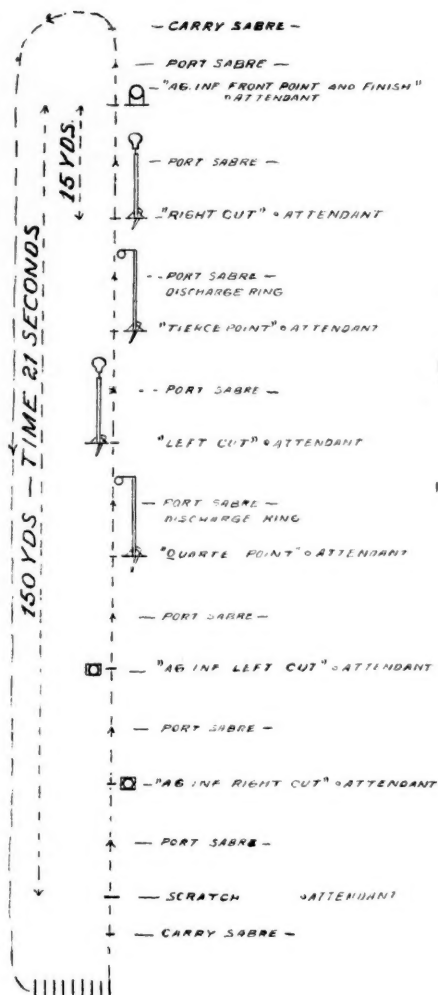
Fifth. "Tierce point," same as quarte point. Post to be seven feet high. To count 2.

Sixth. "Right cut," same as "left cut." Post on right of track. To count 1.

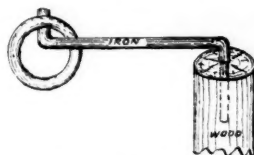
Seventh. "Against infantry, front point." An iron disk placed upright, edge on ground facing runner. To be knocked down by point of saber. To count 3.

Eighth. "Saber exercises." This consists in coming to the "carry saber" at the start and finish; to the "port saber" at the "scratch," and after each object is taken or missed, and after the last object is taken or missed; also in taking each object in the manner prescribed, and in discharging the rings from the saber in the manner laid down. This is the most important part of the run, for it is a known fact that men most expert with the saber in saber exercise mounted and dismounted will frequently neglect all they know in the excitement of motion with a horse to manage and a material object to attack. Giving to each of these points a value of, say one-half, we would have for the entire run, after coming to the "carry saber" at the start:

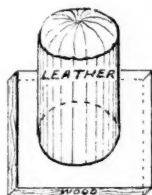
1. Port saber (at the scratch).
2. Against infantry, right cut.
3. Port saber.
4. Against infantry, left cut.



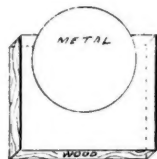
HEADS AND POSTS
FOR
CUTS AGAINST CAVALRY



PIERCE AND QUARTE POINTS



AGAINST INFANTRY
RIGHT AND LEFT CUTS



AGAINST INFANTRY
FRONT POINT

5. Port saber.
6. Quarte point.
7. Discharge of ring from saber by a moulinet.
8. Port saber.
9. Left cut.
10. Port saber.
11. Tierce point.
12. Discharge of ring from saber by a moulinet.
13. Port saber.
14. Right cut.
15. Port saber.
16. Against infantry, front point.
17. Port saber.
18. Carry saber.

Eighteen points at one-half value for each, to count 9, total value for each run 30, each trooper to have three runs, total possible 90.

At first thought the points above enumerated for "saber exercise" might seem too numerous and complicated, and in the hurry of a run it might seem hard to note and keep track of them; but the invariable rule of coming to the "port" when not engaged in a thrust, cut or discharge of a ring, would make this lapse at once noticeable. The two discharges of the ring by the moulinet and coming to the "carry" at the finish are the only other points outside of the motions made at the objects themselves. As each lapse counts the same against one, it is only necessary to count the lapses as they occur, and one-half of this number is the number of points forfeited. Nine minus this is the number of points to which runner is entitled in "saber exercise."

The reason for using wooden pins and heads instead of leather heads resting directly on the posts, is to insure the runner's making the cuts in the horizontal manner prescribed.

With the leather head, nine men out of ten will habitually tap it with the saber or cut down vertically at it with more or less awkwardness, depending mostly upon the amount of attention consumed with a fractious horse.

The necessity of discharging the ring with a moulinet is apparent.

The cuts and thrusts against infantry have been placed on the ground for the following reasons: Heads on posts three feet high can be almost reached by the saber without any derangement of horse or rider, it being merely a matter of judging the speed sufficiently well to drop the saber at proper time. It is a test of horsemanship to cut objects on the ground, and the feat is by no means impossible or even difficult to properly instructed men. This feat being possible, everyone will thereafter be able to reach the objects between that level and three feet high.

One object of the mounted saber exercise being to extend the trooper's sphere of action, both vertically downward and horizontally to right and left, it can be readily seen that his reach from the saddle is extended, and that he is able to strike a long range blow against an antagonist before the said opponent, who knows only how to fight at close quarters in a limited sphere of action, is aware that he can be reached.

In this connection I would like to ask any one who has had charge of instruction in this line of work, if troopers do not habitually strike too late at all objects when moving at a full gallop, and how many of the men under your instruction did not, in striking objects on the ground, miss them anywhere from five to ten feet.

In the latter case this has two causes: First, misjudgment of the speed; second, a lack of timely preparation for the blow in the matter of position. In "Against infantry, right cut," for instance, the trunk of the body must be bent forward so that the shoulders are no higher than the seat in the saddle, left shoulder near and to the right of the horse's mane, left hand to the left of the horse's mane, pulling right rein taut against horse's neck to hold him straight and keep him from swerving to the right.

The first position of "Against infantry, right cut," is assumed with the right hand at left of breast, saber pointing in prolongation of the trunk of the body. This makes the saber point almost horizontally to the front. With the weight of the body resting largely in the right stirrup, we

have the preparatory position for striking the object—a position which should be assumed with the eye on the object from ten to fifteen feet before the object is reached. To execute the cut little more than an arm movement is necessary over an arc, with the saber-point only long enough to get sufficient momentum in the saber to deliver the desired force when the object reaches the horse's feet slightly in front of you. The center of revolution is the arm socket at the shoulder and the radius equal to the saber plus the bent arm. The necessary bending of the knees and raising of the feet to properly grip the horse of course belong to the movement.

There is no danger, either, in a cut thus delivered, of striking the horse's hindquarters with the last part of the cut. Much energy, muscular tissue and wind are saved by not throwing the whole trunk of the body pivoted on the buttocks into the cut; by this last method the point of the saber travels through the air on an arc whose radius is little short of the trunk of the body, plus the saber arm, plus the saber, all revolving around the saddle as a center, and in many cases with the legs chasing wildly in the direction of the horse's rump around the same point.

I do not mean to say that none of the weight of the body should ever be used in the cut described. The point I make is that this is an easy thing for anyone to do, that only so much of this weight should be used as is necessary, that for most instances some of the weight of the body *is* necessary, and that troopers should be taught to deliver the cut without any body motion, as thus they are taught horsemanship and saber exercise without any danger of their ever in the moment of conflict forgetting how or neglecting to use the little body force required.

In the cut to the left, the operation should be somewhat reversed, the bridle hand going to the right, the right hand crossing over above it, the saber point in "Against infantry, left cut," being up near and close to the horse's head. The legs and the shoulders are the same as in the cut to the right side, substituting "left" for "right," the right arm as in drill regulations, elbow bent enough for effective delivery of the blow.

In "Against infantry, front point," similar principles are employed as to time of preparation and position of the various parts of the body.

In the cut against cavalry to the right and left (especially the latter) the principal fault is lateness of delivery of the blow. This may be obviated in the left cut and still have its position as prescribed in the drill regulations, by bending the right elbow and not carrying the saber point any further to the right than is necessary for sufficient force in the blow, which brings it obliquely to the right front; a further advantage here is less liability to "nip" the horse's ears, of which there is more danger in this cut than in any other.

The body should be lifted lightly in the stirrups in preparing for this blow and the shoulders carried towards and turned to the left, thus permitting a quick, short, arm blow.

It is a common error in this blow that the first position is with the saber point straight to the right, arm extended, elbow stiff. Nothing could be further from the spirit of the Drill Regulations. The trooper is not a jumping jack nor an automaton, and the saber exercise is not to be hampered with rigid positions, straight-line geometry nor distances in feet and inches.

In order to insure the proper crouched position in the saddle for the cuts and thrusts on the ground, it is thought it will be found beneficial to have all troopers assume the position in the riding hall or ring and to move them thus at the gallop around the ring. Next, put a good many objects on the ground, and have this exercise practiced in detail by the trooper. I have seen this tried with excellent results.

As a preliminary to the track course prescribed, after a thorough instruction in the matter of details in the riding hall, the troopers should ride over the track past the objects at a "carry saber." They should next be required to ride the course going through the proper saber motions at each object, no rings or heads being touched, each trooper's run being finished before the other is commenced; the instructor taking only a limited number of men at a time, noting errors

and pointing them out to each man, requiring proficiency in the "saber exercise" before actual practice begins.

Next should come the instruction practice with objects up, the scores being recorded, and this followed by record runs.

The following rules will apply to record runs :

All heads on the ground, to count for the trooper, must be knocked off the base on which they rest.

All rings must be discharged with the moulinet, downward, the saber point having passed through the ring, otherwise no credit is allowed. Ring knocked off counts nothing.

The pins supporting the heads must be cut with the edge of the saber ; a pin broken with the flat of the saber or a head knocked off by a blow on the head causing the pin to break, counts nothing.

The time allowance with a stop watch to be twenty-one seconds from scratch to finish at last object.

The gait to be regulation gallop.

If the trooper is still on the track at the end of the twenty-one seconds, he will not be given credit for points made after time is struck.

If a horse bolts no new run will be given.

The judge on exercise to be an officer not of the organization running.

All troopers making 80 points and over out of 90, to be designated "Expert;" those making 70 and over and less than 80 to be designated "Excellent;" those making 60 and over and less than 70 to be designated "Proficient," and a suitable badge or medal awarded each successful contestant.

Several other objects might be inserted as substitutes for any of these designated in the above prescribed course, as for instance, a three-foot hurdle, a five-foot ditch and disks to be fired at to the right and left with the pistol with blank cartridges, the hits to be registered by the powder marks on the white targets of blotting paper or other suitable material. The pistol to be returned and the saber drawn after the pistol firing and before the saber work commences.

These objects could not be added to the others which are

sufficiently numerous already, but two courses of five objects each are recommended instead.

To those who have not tried the above scheme and who think it impracticable, I can say that it was tried at Fort DuChesne in 1896, where two teams from each of the two troops stationed there contested for prizes offered. Much interest was shown even with the improvised equipment used, straight twigs being used for the pins prescribed. One of the troopers afterwards won a prize for excellence in a contest of this nature at the Denver athletic games held under the direction of the Department Commander in 1896 or 1897, where contestants from every troop of cavalry in the department took part, and where this trooper won the General's medal for greater all round excellence than any other trooper.

Nor is the scheme above proposed thought to make a trooper a finished sabreur. It is thought, however, to be a most important and indispensable part of the training required. Add to this, or rather preface this by a more thorough course of fencing with the wooden sabers, both mounted and dismounted, and the question of the trooper's ability is a question merely of his natural aptitude.

Every trooper should be at least taught every movement prescribed for both body and weapon in this exercise until it is second nature with him, and then he should be made to fence till he is well proficient or has demonstrated that he cannot become so. With proper instruction there will be very few in the latter class.

In an article in *The Journal of the U. S. Infantry Association* of July, 1904, on physical culture in the army, Lieutenant Koehler, instructor of gymnastics and physical training at West Point, says: "It has been proposed to detail a number of specially fitted young officers to West Point from June 15th to September 1st, to receive special instruction which will fit them to take charge of service gymnasiums. This in reference to the gymnasium now a part of our new exchange buildings."

He further says: "This course of instruction to embrace the practice and theory of (among other things) fencing."

Now for every troop of cavalry to be properly instructed in this art requires that at least one officer or a non-commissioned officer, who is going to stay with the troop, should be well up in its fine points. And if Lieutenant Koehler's idea is carried out, which is not improbable, why could not the athletic officer of a regiment or a post instruct troop officers and non-commissioned officers upon his return to his command, and in this way introduce the desired knowledge.

This with the knowledge brought by young officers joining from West Point should keep the troops well instructed, if the knowledge has been imparted to those needing it.

From the letter written by the Military Secretary to the Commanding General, Southwestern Division, on December 10th last it would seem that an effort had lately been made by some one in high authority to get more paraphernalia in the shape of plastrons and masks for each troop of cavalry, which could have no other object than improvement in fencing. The letter (copy furnished troop commanders) reads as follows:

WAR DEPARTMENT, M. S. O.,

WASHINGTON, D. C., December 27, 1904.

The Commanding General Southwestern Division, Oklahoma City, O. T.

SIR:—Referring to letter of 10th inst. from this office, advising you that the present allowance of eight fencing outfits for each troop of cavalry stationed in the U. S. would be increased to forty, I now have the honor, by direction of the Chief of Staff, to inform you that in view of the expense involved the additional supply will not be provided.

Very respectfully

(Signed)

F. C. AINSWORTH,

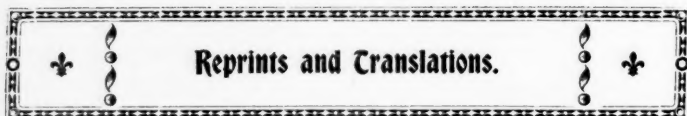
The Military Secretary.

On every field day once a month at each cavalry post one of the principal events should be fencing contests between teams from each organization and substantial prizes should be offered to successful teams. On the next field day the contestants of the previous month will be ineligible to con-

test. Officers should foster and encourage this exercise, and a strict account of the work done by troop commanders, be required in their monthly reports on the subject, only, however, until all have been thoroughly instructed, when, with the exception of the monthly contests, drill should cease.

While the above outlined scheme is thought practical and needful, the writer is aware that it might well, upon close examination, be corrected and improved. It is believed, however, that what has been set forth will be found a good framework upon which to build. That something is needed to improve the cavalryman's use of the saber the writer is convinced, whether it embody a part or any at all of his own ideas on the subject, and any plan of action which will economize time, accomplish the desired result and do away with the present aimless schedule, would, I feel sure, be welcomed by many officers responsible for this branch of instruction in the service.

NOTE.—The above article was found among the accepted material on hand when the present editor took charge of the office. It was evidently written before the passage of the law giving additional rewards in the form of extra pay for expert riflemen, sharpshooters and marksmen.—[EDITOR.]



FIRE ACTION OF CAVALRY.

BY LIEUTENANT COLONEL PAULT LICHTENSTEIN v. HOMROGD,
AUSTRIAN HUSSARS.

FROM THE *Austrian Cavalry Monthly*.*

IT is clear that cavalry has use for the carbine to fully perform all its duties. This was well known when that arm was adopted (no rational cavalryman will think of maintaining the opposite), and our cavalry is now permeated with the idea that we must be thoroughly drilled in fire action. In the practice of maneuvers on a small or large scale the carbine is utilized often enough and at war games and other exercises often more than is necessary. Therefore our cavalry is not suffering in any way from an under-estimation of fire action.

But to hear nothing but "fire action," as if that was the most essential thing, easily leads to misapprehension and confusion. And this may lead some commanders, in exercising their commands in the use of the carbine, to exceed all proper bounds and cause the proper mounted drill and instruction to suffer thereby.

We should take things as they are, *de facto*, and not fall into the habit of deceiving ourselves. The ideal for cavalry undoubtedly would be to have perfection in our mounted and dismounted work, but to be cavalry and mounted in-

*Translated by Sergeant Harry Bell, Corps Engineers, U. S. Army.

fantry at one and the same time is impossible. If we insist that cavalry should reach the proficiency of infantry in fire action, then we cannot perfect it in its mounted duties, and if we neglect the latter, we have no longer any cavalry. Be a troop of cavalry ever so well drilled in fighting on foot, it is of little use if unable to ride, because it cannot get to the point where it is expected to fight with the carbine.

At present all contentions and opinions regarding the fire action of cavalry are based on the experiences of the Russo-Japanese War, although reliable and exact reports concerning this war are so far very meager. Official reports are for the greater part not available, and why then should we interfere with our cavalry unless we have more data to go by?

It is contended that from now on good results in reconnaissance can be obtained only through fire action, and to prove this, it is pointed out that the Cossacks in all cases encountered hostile infantry in front of the army. Well and good, but has it ever been otherwise heretofore? Did not reconnoitering cavalry, after defeating the hostile cavalry, always encounter the outposts of hostile infantry at rest, or the advance guard of hostile infantry on the march. And what did the Cossacks do? They deployed for fire action, remained opposed to the enemy or attacked with the carbine, often fought with the utmost valor and then retired, beaten and demoralized, without having attained any results and without being able to continue the reconnaissance, after having suffered great losses.

Therefore we ask, and correctly, where was this great advantage of fire action? What were the results? The results were that many lives were lost and no information gained for the commanding general. Of course we need the fire action, but not in the manner that foot troops carry it out.

We often will have to dismount, but in most cases only with a definite purpose in view, to mislead the enemy, to delay him, to draw his attention to us, to disorganize his lines by inflicting losses, to maneuver to obtain our ends with part of our force, utilizing our mobility therefor.

Our fire action should be carried on mounted when acting independently; we must not seek a decision on foot; we must never continue an engagement dismounted to a decision, unless we are absolutely certain of success. The Cossacks have shown us the hopeless condition of a cavalry detachment beaten while fighting on foot. Any modern intact infantry is exceedingly superior to dismounted cavalry. We cannot attack infantry with hope of success, should it be equally strong or stronger than ourselves. Finally, we must admit that we have also to think of our horses, for without them our usefulness is at an end in the campaign, and the knowledge that, dismounted, we are inferior to infantry, is an important factor.

We should never sacrifice our cavalry to attain unimportant results, for in time of war cavalry cannot easily be replaced, and a useless endangering of dismounted cavalry in an attack on intact or superior infantry means sacrificing it.

On the other hand, there may be occasions when the cavalry, dismounted, carbine in hand, must use everything, even the last man, in order to bring a battle to a favorable decision, regardless of losses, regardless of horses, and regardless as to whether or not the cavalry will ever be ready for battle again. But these cases are very exceptional.

And how is it with raids? Only cavalry that is well drilled in horsemanship and well trained can successfully carry out a raid, and in this lies the chief value of cavalry; this shows whether or not it is professionally educated, whether or not it can maneuver in the terrain according to the object of the raid, whether or not it understands how to properly estimate the capabilities of the horses, etc.; in short, whether it is cavalry or only mounted infantry.

Finally, after so many days have been consumed in the hardest kind of riding, under the most difficult conditions, comes the execution of the fire action, the attack on the point laid down as the objective at the start, the battle with hostile infantry. Cavalry, which is not educated professionally up to an excellent standard, will never be able to overcome all the difficulties en-route and possibly may never reach its objective, or should it do so, it is in a condition

unfit for service; and how it will ever return no one knows.

That the Russian reconnaissance service did not succeed, that the Russian cavalry raids were apparently unsuccessful, and furthermore, that the Russian cavalry during and after the main battles did not play the required rôle, was the result of deficiencies, which we may ask if they also obtain in our service. Was not the apparent inactivity of the cavalry the fault of the Russian leaders? Why should we on this account inaugurate reforms in our service?

Captain Spaits of the cavalry, who participated in that campaign, as is well known, did not mention in his recent lecture, that the failures of the Russian cavalry are traceable to insufficient practice in fire action. On the contrary, he states that it was the result of insufficient professionally educated cavalry squadrons and troops and an absence of efficient cavalry leaders.

It is natural that we strive to reach our ideal. We desire a cavalry which can also fight on foot. We use our best efforts to reach this ideal, but we will soon reach the limits of our powers. These limits are defined by the present material at our disposition and the want of time. These two factors go hand in hand. If we increase the requirements concerning instruction dismounted, then our cavalry can no longer keep the place it has held up to the present time. If we had material excellent in every respect, then the mounted instruction might be facilitated and we might gain time for the dismounted instruction as well. We should strive to attain this end.

Inasmuch as we are unable, with the material at hand, to complete our instruction in fire action because of want of time, we must strive to improve our personnel in every respect, and this can be done with little exertion. Then greater results can be expected of the cavalry. Cavalry must principally be cavalry, and then we can experiment on it with infantry matters. A solid foundation supports much; a weak one breaks down under its load.

Our first attention should be directed to the improvement of our horses, as with our present means the acquirement of sufficient remounts is hardly probable. (Germany

has twenty-six remount depots, and the average price of remounts is 1400 marks.)

Everyone will admit that a good blooded, well built, healthy horse can be trained more easily than one not having these attributes; that the instruction of men, using such horses, is greatly facilitated, and the time gained in this instruction might be used in target practice.

The next is the improvement in the character of our men. In our Empire we have many who are especially well fitted for the cavalry service, people naturally born for it, so to speak. These we should utilize more. How often do we find sons of stockmen, etc., and men who have spent their entire life on horseback in the ranks of the infantry. That is almost a sin! In selecting recruits for the cavalry we should proceed more carefully, with more professional intelligence, and with a better regard for the necessities of our arm of the service. What a large number of men do we receive each year that are totally unfit for the mounted service!

All explanations regarding this fact are refuted by the fact that when in January, 1906, a lot of infantrymen of the 1905 draft were assigned to the hussars, they were found to be the most excellent material for cavalry. Men of the draft of the same year assigned to the cavalry could not be considered in the same class with them.

The ways to remedy this evil are simple and easily carried out, and are to assign experienced cavalry officers to the examination committees, cavalry officers who have the best interest of their branch of the service at heart. The instruction of well qualified men would be hastened, and again, time gained for instruction in fire action.

The utmost care should be had in selecting competent instructors; this means the increasing and improving the corps of non-commissioned officers.

In building up our cavalry by these means we would gain a two-fold advantage: First, the consciousness that we have brought our cavalry to its highest standard with the means at hand, and that such a cavalry corps would have no fears of losing anything of its value as cavalry by the increased requirements in its instruction as a dismounted corps; and

second, we would gain much time in the instruction of our specially selected troopers, which time could be used in improvement in fire action. Only in this manner can we make an appreciable step forward.

CAVALRY MANEUVERS: AN EXPERT CRITICISM.

From the London Daily Telegraph.

A MILITARY correspondent, referring to the recent cavalry maneuvers, writes:

The general criticism would, in my opinion, point to the absence of an Inspector-General with real control. In the history of cavalry the highest degree of excellence is found in the German cavalry under Frederick the Great. That monarch had the "flair" of the soldier, and was his own inspector general, with authority. There you have to my mind the supreme mistake in our system. Also the actual riding of cavalry leaders is now not so much thought of as it used to be. I put this most seriously, as the hard, tireless man can use his head longer and better than a less hardy sort. You find in history that youth and bodily vigor were the attributes of all really great cavalry commanders, and that these commanders were selected by a great judge of soldiering and men who was in supreme authority.

When the inspector is a capable one he always contrives to produce a good result. Our inspector is "War," and the result is that our mounted troops are "combed" into a far higher state of efficiency at the end of our campaigning. To take South Africa as an example, the commanders of activity in the field, who were all under forty years of age, had learnt "what not to do."

Of course regrettable incidents must happen in cavalry matters, like falls and accidents at polo and hunting, with the very best of systems.

Another point occurs to me. I read that in the attack on both sides, "Squadrons charged individually, shouting." Well, we now, perhaps, have run "squadron training" a bit too hard, and also "initiative" on the part of squadron commanders. As Jorrocks says, "Foxhunting is the image of war," and a pack of hounds can well be compared to a cavalry unit. You want dash and "initiative" in your individual hounds, but they must work as a pack, be in hand and be disciplined. Your brigadier, or huntsman, who sits on his horse blowing his horn while his hounds or men are "initiating," would, in the case of the brigadier, be at the mercy of a quick commander with his command in hand, or, in the case of fox-hunting, be the laughing-stock of a good fox. As for the "shouting," it is most impressive when carried out with discipline, and the cheer of a body of men charging in good order I am all for, but this particular cheering, I gather, came from a lot of small units charging without much discipline and could not be sound.

In Germany the inspectors have full authority over cavalry matters, and report direct to the Emperor; they are also constantly leading divisions before and after maneuvers. The inspector of cavalry is the supreme authority over that arm, and ought to exercise large units when feasible. Surely if his opinion is worth having at all, he is entitled to form it his own way. Is that so under the present order of things with us?

Again, to compare with fox-hunting, you are to judge of a pack of hounds in the kennel in July, and pronounce on their merits, or possibly (and I am not sure whether this be not an even better comparison) to form your opinion on the few hounds sent to Peterborough Show, and not even see an entire pack. It's easy to say, as I hear often said, "The cavalry are wonderful now, quite different from what they were in the 'good old days.'" "Intelligence," "initiative," "individuality," sound glorious and better than the terms of the old days—"discipline," "drill," and "d— your eyes." The fact is, both systems—the new and the old—can be overdone, and you want a high authority to blend the two. If the full responsibility be given to the right man, all will go well; if

not, it won't, and there's the rub. I think the system of cavalry and artillery may be lectured and theorized on to too great an extent. We may "override" our staff rides, and when we come to actual cavalry work we make more deplorable elementary blunders. A good many nations may do the same.

SUGAR FOR HORSES.

[From *Broad Arrow*.]

COLONEL J. A. NUNN, principal veterinary officer in India, has recently issued the following note on the use of sugar as a food for horses:

"The value of sugar as a feeding stuff for horses, mules, and other animals, does not appear to be quite realized. In many parts of India sugar is largely grown, and 'ghur' or 'jaggery' can be obtained at reasonable rates; also, from sugar refining works, molasses. This latter, which is a by-product, is largely used on the continent of Europe and in America as a feeding material for all sorts of animals.

"The common impression seems to be that sugar products are only useful for fattening animals, but it has been proved in France that horses can do prolonged and fast work on it. Molasses forms part of the regular ration of the horses of the Paris General Omnibus Company, and competitors in the long distance rides in the French army have been trained on sugar, in some instances as much as six and eight pounds per diem having been given, in addition to the ordinary food.

"Molasses was very largely used to feed the horses of the American army on in Cuba during the war. They did hard work on it and grass alone, at a time that grain ran short. Of course, with only one or two animals 'ghur,' 'jaggery,' or 'molasses' can be mixed in the feed by hand. If a large number of animals are fed on them, and specially with

molasses, the plan adopted by the Americans in Cuba seems worthy of consideration. The molasses was put into a sack and left soaking in a barrel of water all night. In the morning the grass or hay was spread out in a layer, and the solution of molasses and water sprinkled over it with a garden watering pot. The grass or hay was thoroughly saturated and allowed to dry in the sun, so that each separate stalk was covered over with a thin coating. It is claimed for this method that it is more economical, that the ration of molasses is more evenly distributed, that the horses eat very inferior grass and hay with a relish, and that if molasses or treacle, 'which are sticky substances,' are used they are more easily handled than if mixed up with the food in bulk. If 'ghur' or 'jaggery' are used and given in the grain ration it is hardly necessary to take this trouble, as they are both easily handled. If, however, the object is to make inferior grass or hay palatable, the American plan would seem to be most practicable, and worth the labor expended.

"In the Austrian army certain preparations of molasses, 'known in the trade as molasine and molascute,' are authorized as an additional ration for horses after autumn maneuvers, when they are somewhat run down in condition through hard work. It must be clearly understood that it is not intended to convey the impression that sugar products can be substituted for grain or used indiscriminately; all that they are intended to convey is the fact that sugar is a valuable adjunct, provided that it can be obtained at a reasonable rate. This in certain parts of India is the case; in others of course the price would be prohibitive.

"As has been mentioned, as much as six to eight pounds of sugar has been given per diem, but this is an extreme case, where money was no object. For army animals the quantity to be used would depend on the market rate. It has, however, been found that from half to one pound per head of molasses made into a solution, as described, is sufficient to make horses eat inferior grass, and from one to four pounds per head per diem will make an astounding alteration in the condition of run-down animals in a fortnight. Although so far as is known beetroot sugar is not

produced in India, it may be worthy of remark that it is dangerous if given in excessive quantities, six to eight pounds per diem being the maximum that can be used with safety. The chemical composition of beetroot molasses differs from cane molasses."

CAVALRY ARMAMENT OF VARIOUS NATIONS.*

Germany.—Carbine, model 1898, saber and lance. The non-commissioned officers and trumpeters have revolvers. The mounted chasseurs have only saber and revolver. Officers carry sabers (of cavalry officers or of cuirassiers) and revolvers.

Great Britain.—Officers, certain non-commissioned officers, and trumpeters, saber and revolver; other non-commissioned officers and trumpeters, saber and rifle, model 1903. The regiments of lancers, the troopers of the first echelon of dragoons and dragoon guards carry the lance in reviews or honorary service. One machine gun to a regiment. Maxim 7 mm., 7.

Austria-Hungary.—Saber and Mannlicher magazine carbine, model 1895. Non-commissioned officers, saber and revolver. (The lance has been abolished since 1883.)

Bulgaria.—Saber (Russian model) and Mannlicher carbine of the same model as the infantry rifle, but shorter and lighter.

Denmark.—Personnel: To a squadron of hussars, three automatic rifles, caliber 6 mm., 5.

Spain.—Lancers: Three platoons carry lance and saber, one platoon the Mauser carbine, model 1893, and the saber (sharpshooters); the other regiments carbine and saber.

France.—Saber and carbine, model 1890. Non-commissioned officers, saber and revolver. In regiments of dragoons

*Translated from the French in the Military Information Division, General Staff.

forming divisions, the troopers of the first echelon carry the lance.

Greece.—Saber and Gras carbine, model 1874.

Italy.—Lancers: Lance, saber and Mannlicher-Carcano musket, model 1891. Light cavalry: saber and Mannlicher-Carcano musket, model 1891. Non-commissioned officers, trumpeters and sappers, saber and revolver.

Norway.—Personnel: Four automatic rifles, caliber 6 mm., 5 to a corps.

Netherlands.—Saber and Mannlicher carbine, model 1895. Non-commissioned officers and trumpeters, saber and revolver.

Portugal.—Lancers: Lance, saber and Mannlicher carbine, model 1896. Chasseurs: Saber and carbine. Drivers: Revolvers.

Roumania.—Hussars: Men of the first echelon, lance, saber and Mannlicher carbine, model 1893; men of the second echelon, saber and carbine. Chasseurs, saber and carbine. All non-commissioned officers carry the saber and revolver.

Russia.—Saber and magazine carbine, model 1891, with bayonet. Cossacks of the Don, of the Oural, of Orenburg, from Transbaikal and from Siberia carry the lance besides in the first echelon. The Cossacks carry no bayonets. Non-commissioned officers and certain of the men are not provided with carbines, sabers or Nagan revolvers.

Servia.—Saber and Mauser carbine.

Sweden.—Saber and Mauser magazine carbine, model 1896. To each cavalry regiment a certain number of automatic rifles, caliber 6 mm., 5.

Switzerland.—Saber and Mannlicher magazine carbine, model 1893. Non-commissioned officers, saber and revolver, model 1882.

Turkey.—Saber and Mauser carbine, model 1890.

THE STUDY OF MILITARY HISTORY.

[From the *United Service Gazette*.]

THE military field is ever open to the master spirit to dictate further changes—to the man of ideas, with capacity to give them shape, to bring about additional improvements. To avail himself of it he must study early and late; not dream, but casting aside professional prejudices and narrow views, become receptive to new ideas; ponder well on the causes which led to success, and even more on those which entailed disaster in the past; work out problems fitted for the altered circumstances of the present, and patiently calculate the means to carry out some high design in future. For this it is necessary that military history should be patiently and consistently studied, but the study should not always be confined to that of modern campaigns. There are other sources, not always sufficiently sought for, which furnish much invaluable information connected with operations of war—of a kind, too, which may not unlikely convey more useful lessons in the conduct of the particular description of warfare that may at the time be the subject of study. With such an enormous, scattered, and ever increasing Empire as ours, the main problem to be studied by an officer who aspires to high command should certainly be, “How best to render each component part of our great Empire strong, within and without, through its own population and resources, and, at the same time, secure such a union of the whole as will safeguard all parts and prevent aggression from any hostile quarter.”

It has been said of young officers that while they are “ready enough under encouragement to study strategy and tactics and to read military history, they have in the one case no clear conception of the practical value of the definitions and principles which they may absorb, and in the other they fail to appreciate how a situation must have appeared to a commander when shorn of the light thrown upon it by later events.” Though we are not prepared to join to the full in

a reproach of this nature, we are yet forced to the admission that, except for examination purposes, it is rarely that the officer reads military history with the minuteness that it certainly requires, if it is to prove of any real use to him in his professional studies. Yet if an officer aims at the higher branches of his calling the proper study of military history is indispensable to him, affording him, as it does, a masterful insight in fertility of resource or originality in conception of strategy—factors which have countless times contributed to the winning of a battle or to laying the foundations for success in a campaign.

"The value of history to a soldier," says Lord Esher, "is to throw light beforehand, and in good time, upon the uses to which our army may be applied. * * * A little consideration, a short examination of our national history during the past sixty years, will show that although the defense committee may properly be asked to establish a standard for the army, just as years ago a standard, the two-power standard, was laid down for the navy; it would be rash and dangerous to attempt officially, except in very general terms, to stereotype a definition of the purposes for which the army is required. * * * We can, however, by study and examination, gauge the greater possibilities, and even the greater probabilities. That is the task to which the study of modern history invites us, just as it lured Lord Roberts—as we know from his evidence before the War Commission—to plan, in discussion with some young officers of the Staff College, the lines of his advance to Pretoria some considerable time before the spring of 1900."

But when studying military history something more is wanted than the mere absorption of the narrative and the retention in the memory of certain facts. Combined with the mastering of the particulars narrated in the history, there should be a comprehension of the lessons in strategy and tactics which the events recorded in each campaign illustrate, and the mental analysis of the causes which led up to the success of one commander and brought about the failure of another, so that material profit may be wrung from the study, which would be likely to benefit the officer should

he ever be placed in a similar situation. Without a close study of this nature it is quite impossible to gauge the extent of the difficulties that are ever arising in war, and which test to their uttermost the superior qualities of mind which every great commander must possess. All our training is but preparation for war, and it is by a close study of the lessons of war, as well as of the wonders of modern science, that we can hope to acquire that intelligent combination before which brute force and even individual skill must fail.

The young officer on joining the army possesses but a very hazy knowledge of military history. He may know something of Cæsar's wars and the siege of Troy, from his Virgil and Ovid, but he can scarcely scrape acquaintance with the Napoleonic wars, and it behooves him, therefore, if he wishes to make any progress in his profession, to lose no time in making good this hiatus in his educational training. The consideration of Cæsar's wars and other periods of Roman history may not be without use to him if only as illustrating the great strategy of the Roman generals, who effected the subjugation of native races less by the power of Roman arms than by the masterly direction given to tribal animosities, but modern history is equally essential to one's studies if we are to learn the probable line to be taken nowadays by one's adversary, and the best way to make preparation to meet it. By the careful study of modern campaigns, combined with a due reflection on the lessons they afford, we cannot fail to learn what we ought to do if placed in a like situation, whether under war conditions or during peace maneuvers. It helps one, in fact, as one writer puts it, "to know from this side of the hill what an opponent is doing on the other."

Perhaps the best example of the most profitable method of reading history can be gathered from "Napoleon's Précis of the Wars of Turenne and Frederick the Great." He was in the habit of marking paragraphs and sometimes whole chapters in a volume, after which he would comment on them most carefully, illustrating his comments by references to past examples, which he had obviously carefully looked up, or to future possibilities, upon which he had evidently

long reflected. The professional soldier who reads history after this fashion, equips himself with the power to apply the facts of yesterday to the circumstances of to-day and to-morrow. It is not, after all, a difficult habit to acquire, and without it the study of strategy or tactics is of little value to the really practical soldier. If a man be grounded in general history, as well as in the principles of strategy and tactics, he becomes possessed of the ability to take up any campaign and make a study of it, whether it be the Napoleonic struggle of 1805, Virginia, 1861-5, Franco-German War, 1870-1, or Manchuria, 1904. But the study of military history to be of lasting benefit must be continuous and not intermittent; it must not be taken up to-day and dropped to-morrow like an old glove. Besides the personal benefit derived from a knowledge of history, it will make officers more ready to carry out the orders of their commanders in the spirit in which they are given, because of their more intelligible understanding of their motive. Lord Wolseley's advice regarding the study of the science of war, to "read a little and think a lot," applies with equal force to the study of military history, and a few campaigns well studied and carefully reflected upon, will do more to develop a capacity for hard thinking than would a whole course of lectures on the strategy of a score of battles.

PRIZE PROBLEMS.

IN view of the fact that no prize problem appeared in the April, 1907, number of the JOURNAL, there is no solution to appear in this number.

Upon taking charge of the work of editing the JOURNAL, it appeared, at first glance, that there was not sufficient interest being taken in these prize problems to warrant the continuation of their publication; and also that too long a time elapsed between their publication and the appearance of the corresponding solution.

Upon inquiry, however, it is found that while a comparatively few officers compete for these prizes, that many others are interested in them. Many inquiries have been received for extra copies of the maps on which these problems are based, and it is learned that many of our younger officers work out solutions which they never send in.

It is feared that, in some cases at least, these officers hesitate to send in their solutions, as they have a diffidence in competing against older officers or the graduates of the schools, who have had more experience in such work.

As a further indication of the interest taken in these problems, it is noted that the solution to our prize problem No. 3, with the map, was printed in full in the *Revue du Cercle Militaire* for September 21, 1907, with comments thereon by Lieutenant Colonel Frocourt of the French army.

As to the long time between the appearance of any one problem and its solution, this is found necessary in order to give our members in the Philippines a chance to compete.

Regarding the extra copies of the maps asked for, they can be obtained from the Secretary of the School of the Line at Fort Leavenworth at the nominal cost of seven cents each, or a large scale maneuver map of the same region, mounted on cloth, can be had for one dollar.

EDITOR.

PRIZE PROBLEM NO. 7.

(See Map of Fort Leavenworth, Kansas, published in Number for July, 1907, opposite page 156.)

THE RESCUE OF PRISONERS.

General Situation.

The Missouri River forms part of the boundary between an eastern Blue and a western Red State between which war was declared August 1, 1907. In the fall of 1907 a Blue army crossed the Missouri River at Fort Leavenworth and advanced towards Topeka, but was met by superior forces and driven back with heavy loss to the left bank of the Missouri River, where it went into winter quarters December 1st, opposite Fort Leavenworth.

The Red force was distributed for the winter throughout the State of Kansas, the first Red division being quartered as follows:

Division Headquarters, Second Battalion Engineers, First Regiment F. A., Headquarters First Brigade, First Infantry, Second Infantry (less six companies), Company A, S. C., field hospitals, supply and ammunition trains, Fort Leavenworth.

Six companies Second Infantry, Kickapoo.

Third Infantry, Lansing, three miles south of Leavenworth.

Second Infantry Brigade, Leavenworth.

Third Infantry Brigade, First Regiment Red Cavalry, Atchison, eighteen miles north of Fort Leavenworth.

Special Situation.

The seventh regiment of Blue cavalry, commanded by Colonel A, was quartered for the winter in Weston, Missouri, opposite the mouth of Salt Creek. Extremely cold weather set in about the middle of December, and the Missouri River

froze to a depth of from eight to twelve inches from opposite Kickapoo to the bend opposite the U. S. Military Prison, south of which point the swift current prevented its freezing.

Colonel A having learned from spies the above mentioned dispositions of the first Red division, and also that about 800 Blue prisoners captured by the Reds during the fall campaign were kept confined within the enclosure of the U. S. Penitentiary (south of Fort Leavenworth), submitted to his division commander a plan for a raid having as its object the release of these prisoners. This plan was approved by the division commander and ordered executed without delay.

On the night of December 24th and 25th, a crossing was effected about 1 A. M. A light snow was falling, the ground being covered by about three inches, temperature $+10^{\circ}$ F. Colonel A marched by I. E. Daniels (47), Frenchmans and Atchison Pike to the penitentiary, which was surrounded, found to be lightly guarded, and surrendered without a fight, the railway gate on the west side having been blown in by a petard. En route to the penitentiary no one had been seen except a guard of twelve men at Frenchmans, which had been captured with the exception of two men on post at the bridge, who had escaped. All telegraph wires en route had been cut.

At 5 A. M. Colonel A had collected all the Blue prisoners who had been released (760) and was at the east gate of the penitentiary ready to begin his return march when he received the following reports and messages:

OFFICER'S PATROL, TROOP A.

1 mile north of Frenchman, 4:40 A. M.

To Colonel A.

Hostile infantry, about one battalion, approaching from Kickapoo has halted at 17 and sent out patrols east, south and west. I remain in observation.

E.,

Lieutenant.

OFFICER'S PATROL, TROOP M.

Engineer Hill, 4:45 A. M.

To Colonel A.

Fort Leavenworth quiet until 4:40, when call to arms sounded and buildings all lighted up. I remain in observation.

H.,

Lieutenant.

The messenger who brought this message reported that as he had crossed Long Ridge, lights in Fort Leavenworth had gone out.

PATROL TROOP M.
Grant Hill, 4:50 A. M.

To Colonel A.

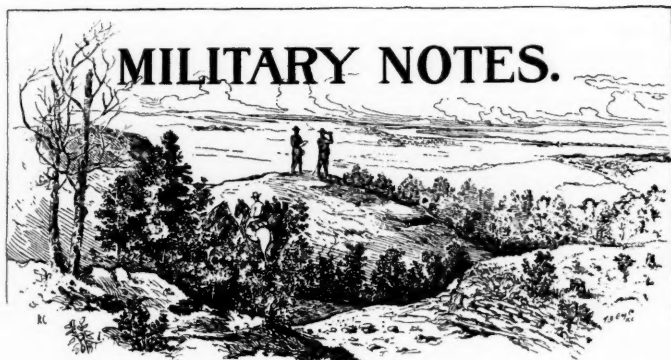
Signal Corps man has just found and cut electric light wires to Fort. I can hear call to arms being sounded all over town of Leavenworth.

X.,
Sergeant.

By this time (5 A. M.) the snow had stopped, but the sky was still clouded.

Required:

1. Colonel A's dispositions on the march to the penitentiary, *briefly*.
2. His estimate of the situation.
3. His decision.
4. His orders.



CHIEF OF CAVALRY.

IN an article published in the October number of the CAV-
ALRY JOURNAL appears an invitation for one and all to
air their opinions as to the advisability or inadvisability of
a chief for the cavalry.

Every one in the cavalry, with very few exceptions, will probably agree that we should have a chief, and many of them would probably admit that they could fill the job. If each and every one of us wrote an article on the subject there would doubtless be brought out many good, indisputable, and self-evident reasons for a chief. But after all these valuable opinions had been expressed would the chief of cavalry be forthcoming? Talk is cheap and easy, easier for some than others. But will mere free and unlimited "hot air" bring us any nearer the ideals towards which we strive than we are at present? I have heard this question discussed for many years, and have read many excellent and convincing articles on the subject, but do not see that any

progress has been made or that we are any nearer to having a Chief of Cavalry now than we were ten years ago.

It would seem that a little less talk, a little more organized effort would secure better results. Let the cavalry get together on this proposition and decide upon some plan of action and then carry it out to the best of our ability, every one doing the best he can to push it through. How did the artillery get their chief? Simply by writing a number of indiscriminate articles in service magazines?

If necessary let us select a committee to look into this matter and present it before the proper authorities as it should be presented.

It is work we need, not talk.

E. S.

PROPOSED CHANGE IN DESCRIPTIVE CARD OF PUBLIC ANIMALS.

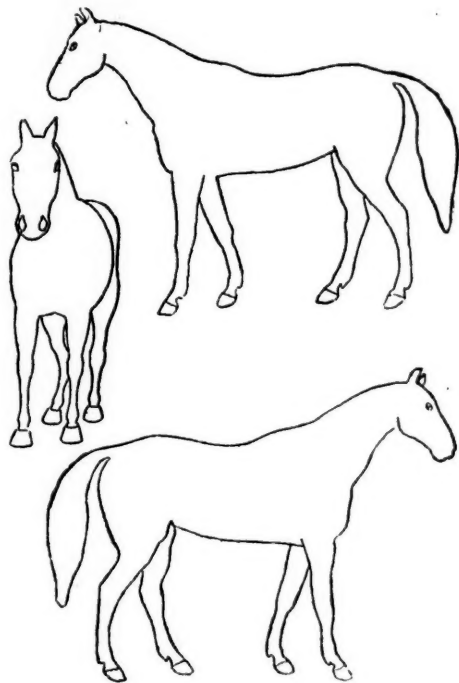
The Editor U. S. Cavalry Journal:

I BEG to suggest an improvement in the descriptive card of public animals (Form 277, A. G. O.) now supplied in lieu of the old descriptive book for public animals, which consists in adding a diagram giving the front view of the horse. A rubber stamp for printing the design can easily be made, and troop commanders and quartermasters can by its use make the requisite addition to the card as now issued.

The card furnished us gives the side view of both sides of the animal, and is useful in recording brands, but it is not easy on these diagrams to note the face markings. On no part of the animal's body are distinguishing marks so likely to be found as on the face. The star, stripe, blaze and snip are frequently so irregular that these marks alone furnish an almost complete identification.

In purchasing horses here in Australia we are obliged to inspect and pass on horses on remote stations far from the

shipping points on the coast. It is therefore necessary to record the description of the horse so accurately and in such detail that it would be practically impossible for an exchange of horses to be effected and an inferior animal substituted before the lot reaches the shipping point and not be detected upon the final inspection as the animal goes aboard ship.



We therefore have printed on the left of the card, as shown in the illustration, the outline of the horse as seen from the front. This arrangement makes it possible to clearly and accurately record any peculiar face markings which the horse may happen to have, and to record also those peculiar markings of the feet and legs which may be more clearly shown in a front view than from either side.

This additional diagram can readily be printed on the cards already in the hands of the troops by means of a rubber

stamp. In printing cards anew a more symmetrical arrangement would be to have the side views shifted a little nearer the right side of the card.

W. C. BROWN,

Major Third U. S. Cavalry.

IS THE GARRISON RATION SUFFICIENT FOR A GOOD MESS?

The Editor of the Journal of the United States Cavalry Association.

SIR:— The article of Lieutenant Sherrard Coleman on the subject, "Is the Garrison Ration Sufficient for a Good Mess?" is one which interests every organization commander, and the account of his work is valuable as showing what one can do who has a gift for such work when he pursues it with interest and energy. He has fallen upon a truth too generally neglected by company commanders when, in speaking of the company mess, he says: "I know of no one thing in the army, which, if properly looked after, will give a better result for soldiers in garrison."

In reading the article, one is reminded, first, that Lieutenant Coleman is an expert caterer, and, whether true or not, there is a general impression that these men are born, not made; secondly, that his lines have fallen in very pleasant places. Running a company mess at Fort Leavenworth, Kansas, in the shadow of the best of markets, does not present the difficulties which beset the same operation in the Philippines, Cuba, Alaska, or in some of the garrisons in the United States proper.

The writer has contended that the garrison ration is not sufficiently varied,* and nowhere has he seen arguments which better support his contention than in Lieutenant Coleman's

*"Articles which should be added to the Garrison Ration," *Journal of the United States Infantry Association*, September, 1907.

article. There is not one of the twenty-one different menus given by him which does not contain at least one of the articles which it is contended should be added to the garrison ration, namely: butter, milk and syrup. He shows conclusively that these articles are absolutely necessary to the successful conduct of a mess, and he provides them by a very careful manipulation of the articles of diet which now compose the garrison ration. He is enabled to do this by the fortunate location of his troop and by his evident capacity for business, a faculty which, unfortunately, has not been developed in the education of the great majority of army officers.

It will be observed in examining his list of savings that the ration components which supplied the bulk of his \$126 are bacon and coffee. (The sugar item may be neglected, for he saves issue sugar and purchases granulated sugar instead.) There is nothing new then in his method of accumulating a saving; the components on which he saves are the ones on which savings are always made. Why, then, it may logically be asked, should the government supply a table of ration components which make this manipulation necessary? Why not reduce the bacon and coffee components in the garrison ration and supply directly, at no great increase of cost, the components which Lieutenant Coleman and all company commanders have found to be necessary to the conduct of a good mess?

Lieutenant Coleman's article may be studied with profit by every officer charged with the conduct of a mess, for it shows conclusively what may be done with skillful management under favorable conditions. The object of this criticism is to call attention to the undoubted defects in the present garrison table at this time when there is a general effort being made to better the condition of the enlisted man. It is gratifying to learn that at least one general officer (General Greely, commanding the Northern Division) has called attention to this defect in his annual report. He states:

"Inclined formerly to the belief that the army ration is sufficient for the proper sustenance of the soldier, the division commander now judges otherwise as a result of his inspec-

tions and investigations. While excellent in quality and doubtless of sufficient nutritive value, its quantity and variety do not satisfy the American soldier. Wherever it is not supplemented by the resourcefulness and energy of officers and men, through supplies from gardens, post exchange profits, pool table charges, boarders, etc., it furnishes only a meager, monotonous diet. The wise policy lately inaugurated by the War Department of permitting savings on all articles will do something to increase the food variety. It is believed that an increase of the ration will make the service more attractive. No specific recommendations are made, though it may be pointed out that the 'white meats,' butter, cheese, eggs and milk, found on every American table, even of the poorest people, are entirely lacking in the army ration, although they appear on the naval list."

ELI A. HELMICK,
Captain Tenth Infantry.

FORT LISCUM, ALASKA,
Sept. 26, 1907.

THE CAVALRY PACK.

CELEBES SEA, (en route to Australia) August 1, 1907.

The Editor U. S. Cavalry Journal:

PERMIT me to add a word to the timely and interesting discussion by Captains Vidmer, Gray, Rhodes, and others, on the cavalry pack in recent numbers of the JOURNAL.

All must admit that with the additional weight of the new rifle, its scabbard, and other articles more or less recently added to the trooper's pack, the method of packing, etc., prescribed in the Cavalry Drill Regulations is no longer satisfactory. We seem to be constantly adding to the load of the horse, and but rarely taking anything from it, so that now we seem to have about everything that the trooper needs, and it seems to me, that we have several things which

he, without serious inconvenience, might get along without. Sooner or later we must drop something. Let us, therefore, begin with those articles which we can most easily dispense with. The link, shelter tent pole and picket pin certainly seem to come in this category.

Taking advantage of the ideas advanced by the officers above named, and to whom I wish to give due acknowledgment, and adding a few ideas of my own, I have prepared instructions, which appear below, for making up a pack which is now being experimented with in my squadron. This must be regarded as tentative, being subject to such changes as a thorough trial may demonstrate as being necessary.

Personally, I should like to see something like the Patterson carrier for the rifle given a trial. It may not be entirely satisfactory, but it could hardly be less so than the present scabbard, which tends to change the cavalryman into a mounted infantryman, the bulk underneath the left leg preventing the latter from being used in controlling the horse.

W. C. BROWN,

Major Third U. S. Cavalry.

* * *

*Memorandum of Instructions for Packing the Saddle
(Experimental).*

The articles carried, where carried, and approximate weights, are as indicated below:

LEFT (NEAR) SIDE.		RIGHT (OFF) SIDE.	
	lbs.		lbs.
Rifle and scabbard.....	11.9	Saber, scabbard and knot	3.95
Lariat.....	2.1	Canteen and strap, filled	3.44
Meat can95	Currycomb65
Knife, fork and spoon.....	.38	Horse brush.....	.625
Cup.....	.56	Watering bridle	1.1
		Two horseshoes and nails	1.75
		Nose bag, leather bottom.....	.43
		Emergency ration	1.125
		Towel, soap, etc.....	.5
		Housewife2
		Four shelter tent pins.....	.2
	15.89		13.97

The following articles, with their weights, are enumerated to complete the total weight, exclusive of the rider, carried by the horse; these, from the very nature of the case, do not have to be considered in balancing the load on the horse :

	lbs.
Saddle complete.....	17.3
Saddle bags.....	4.2
Saddle blanket.....	4.3
Surcingle.....	.75
Blanket.....	5.00
Underclothes.....	1.25
Shelter half.....	3.00
Poncho.....	4.5
Bridle and bit.....	2.6
Halter and strap.....	2.6
Mosquito bar.....	.9
Eighty rounds rifle and twenty-four rounds revolver ammunition; Pistol and holster; Lanyard and woven cartridge belt with buckle.....	10.5
Clothing and F. A. package.....	6.43
	63.33

It will be noticed that the following equipments are omitted :

Link.—It having been demonstrated that horses can be quite as securely, and quickly enough for all practicable purposes, linked by use of the reins as by the link.

Picket Pin.—The occasions when this is really necessary are infrequent, and it is proposed by experiment to ascertain whether or not the rare occasions when it is absolutely needed justify carrying at all times this additional weight.

Shelter Poles.—The saber in scabbard, with blade withdrawn about five inches, and held in that position by a wooden peg, so as to make the whole the exact height of the shelter pole, will be used as a substitute for the shelter pole, as already explained to the squadron.

The poncho or slicker will be carried instead of the bed blanket, as permitted by G. O. No. 16, c. s., Philippine Division.

To roll the rear pack, spread the shelter half (model 1904) roll straps underneath. Turn in the triangular end flap,

making the tent rectangular. Turn under the roll strap edge of the shelter half eight inches.

Fold the blanket in three equal folds across the longer edge. Lay it squarely and evenly on the shelter half, the longer (folded) edge within one inch of the roll strap edge. Place the left hand in the middle of the blanket and fold over the ends of the blanket to the hand, or to within four inches of each other; place the underclothing on the outer edge of the blanket. As a precaution against ends pulling out, pass the two exposed roll straps across and fasten to opposite buckles. Roll tightly, using hands and knees, from the bottom of the roll to the roll straps, and bring over the entire roll the part of the tent which was turned under, thus binding the roll. Buckle the two available roll straps about the roll, passing them around twice. The roll will then be about thirty-six inches in length and six inches in diameter.

The cup is placed, handle upward, in the bottom of the near saddle bag; meat can, knife, fork and spoon, as usual.

The lariat is rolled and snapped into the near cantle ring; to leave it rolled tends to make the pack more compact. In case it is desired to hold the horse at the end of the lariat while firing dismounted, it can be unrolled and snapped into the halter ring quickly enough for all practicable purposes, and the objectionable end underneath the left leg, so liable to get caught in the spur when dismounting, is done away with.

Canteen snapped into the off cantle ring as usual.

Where the bit and bridoon are worn, the watering bridle is not carried.

The nose bag with strap lengthened about nine inches is slipped over the off end of the cantle roll and secured in the usual manner.

It will be noticed that the heavier articles are carried in the off saddle bag. This is done to balance the excess of weight of the rifle and scabbard over the saber. This is not quite accomplished, but it is the best which can be done.

The principle of the cantle roll is that devised by Captain Vidmer.

The cantle roll being broken in the middle and strapped tightly with the middle coat strap, will not rest on the horse's back. The whole roll sets lower than the regulation roll, lies neatly along the back of the saddle and prevents the canteen and lariat from flapping when at the trot.

Certain other dispositions are those suggested by Captains Gray and Rhodes.

The instructions here given are for making the roll with the blanket, though in the Philippines the slicker or poncho is usually substituted therefor, while the mosquito bar is carried as an addition.

The roll with these articles is made up on the same principle, large at the ends and small in the middle. If rain is not apprehended, the poncho or slicker may be carried in the cantle roll, saving the wear of the coat straps on the rain garment, and wearing holes in the latter.

The surcingle should go over the saddle and incline slightly to the rear to keep the saddle from sliding forward. It should go under all straps, the near end being drawn up until the strap is well up on the near side.

The slapping of the rifle butt against the horse's neck may be stopped by a strap, made up like a link strap, about thirty-one inches long, attached to the off spider ring. A small ring is attached near the lower end of the rifle scabbard and the strap snapped in after saddling the horse.

A CHIEF OF CAVALRY.

THERE is undeniably a strong feeling among the highest military authorities of our army against the organization in the War Department of any office which might ultimately develop into a bureau. The feeling has been that there are already as many bureaus as the efficient administration of military business will stand.

Furthermore, there is a not altogether unnatural feeling that the appointment of a Chief of Cavalry would sooner or

later infringe upon the lawful duties of the Chief of Staff; and perhaps, in a degree, tend towards such centralization of cavalry control as would involve the rightful functions of department commanders.

This feeling, it would seem, has not been decreased by the organization and development of the office of the Chief of Artillery. Beginning in a modest way, with a Chief of Artillery and his two aides, having rather advisory functions, the office has grown in a few years into what amounts to an artillery bureau, having half a dozen officers and a number of clerks as assistants, and running dangerously close to the work originally planned for the General Staff and the Adjutant General's office.

No wonder there has been a feeling of reluctance towards the formation of other bureaus of a similar character for the cavalry and infantry; and we must confess that we feel that organization upon the same lines as that of the office of Chief of Artillery would be contrary to good military administration.

But what should be done is this: Reduce the office of Chief of Artillery to the original chief and two assistants, all of whom shall be *ex-officio* members of the General Staff; make similar designations for the cavalry and the infantry; and let these three chiefs take charge of questions which are at present handled by junior officers of the General Staff.

In this way the chiefs of the three services would be subordinate to and report directly to the Chief of Staff; they would relieve the latter of many petty details of training, equipment and recruitment; and each arm would be represented upon the General Staff by an officer of rank commensurate with the importance of the questions submitted to him.

It is impossible for a Chief of Staff to give detailed attention to all the requirements of the arms of the service. The most he can do is to exercise a broad supervisory policy, and leave the details to trusted officers of suitable rank and experience. One can imagine what a loss of efficiency would result were the Chief of Staff to attempt to administer the affairs of the engineer or medical corps through subordinate officers, instead of through their respective chiefs.

And yet the increased complexity of questions affecting the cavalry service, its tactics and training, arms and equipment, horse and forage supply, veterinary service, pioneer or demolition service, etc., is such that nothing but good could result from the detail of a general officer, strictly subordinate to the Chief of Staff, whose particular work should be along the above lines, with collateral duties of a General Staff character.

We must confess, too, that we believe the best results would follow an application of the same methods of selection for these chiefs, as are at present used for the General Staff, viz., selection to be made by the board of general officers from among the colonels of cavalry and infantry, such detail to continue for four years, as for other General Staff officers.

Such a scheme would certainly result in greater *esprit de corps* in the cavalry and infantry; in greater satisfaction that the interests of the arms are receiving at Washington, the consideration which their importance merits; and in more efficient administration in the War Department.

The formation of our General Staff was certainly a long step in the right direction; but its internal organization seems capable of improvement along the lines indicated.

R.

CAVALRY REMOUNTS.

THE following correspondence on this subject is self-explanatory:

HEADQUARTERS UNITED STATES MILITARY ACADEMY,
WEST POINT, N. Y., October 17, 1907.
Lieut. Col. Ezra B. Fuller, U. S. Army, Retired,
Editor Journal U. S. Cavalry Association,
Fort Leavenworth, Kansas.

DEAR SIR:—I am enclosing herewith the views of the cavalry officers here on the "remount" question, particularly with reference to your editorial in the last number of the CAVALRY JOURNAL. We would be extremely obliged to you

if you would publish it in the next issue, and also if you will ascertain the views of other cavalry officers of other posts on this matter, for we feel your statement is in error in saying that you speak the views of the cavalry.

Very truly yours,

(Signed) J. S. HERRON,

Captain Second Cavalry, U. S. Army.

* * *

WEST POINT, N. Y., October 16, 1907.

The Editor :

On page 269 of the current number of the CAVALRY JOURNAL appears this editorial paragraph concerning a very comprehensive program for a remount system, proposed by the Quartermaster General of the Army, General Aleshire, and contained in the same number :

"There is nothing in all of his recommendations with which the cavalry service will not agree, except the single one that the proposed remount service should be 'a separate division of the Quartermaster General's office, designated *remount division*, and under charge of an officer of the Quartermaster's Department, etc.'

"It is believed that this proposed system of purchasing and training horses for the cavalry service should be under the supervision of a cavalry officer, and in fact this remount division should be one of the branches of the office of the Chief of Cavalry *when we get one*."

We hope that there will be no attempt made to amend General Aleshire's program in any particular by any cavalry officer. It is too good to be hampered by a breath of criticism.

The Quartermaster's Department is equipped with every facility for the purchase of horses. There are plenty of officers in that department whose homes are in the cavalry or field artillery, and whose interests are vitally connected with those arms. More than all, the remount depots, under

General Aleshire's plan, will be manned by civilian employees, better paid than enlisted men are, and much more likely to be permanent there.

In our judgment the cavalry and field artillery officers of the Quartermaster's Department are just the men to have this matter in hand. Give them and their machinery a chance to develop General Aleshire's plan, and we will have splendid results. It is bad policy to advocate distinct purchasing and training plants for remounts for the cavalry, the field artillery and the wagon trains. We ought not to hope to absorb the supply departments in the office of our much desired Chief of Cavalry. The Quartermaster's Department does not like the existing remount system any better than we do, and the present Quartermaster General is anxious to put in a better system, one that no other cavalryman has ever equaled in conception. Let us all put our shoulders to the wheel and help him push it along, as he has made it. He will have a hard enough task to make it go with our best assistance.

Yours truly,

F. C. MARSHALL,

Captain Fifteenth Cavalry.

J. S. HERRON,

Captain Second Cavalry.

H. L. SCOTT,

Col. U. S. A., Major Fourteenth Cavalry.

ROBT. L. HOWZE,

Lieut. Col. U. S. A., Captain Sixth Cavalry.

PETER E. TRAUB,

Captain Thirteenth Cavalry.

* * *

U. S. CAVALRY ASSOCIATION.

FORT LEAVENWORTH, KAN., October 22, 1907.

Captain J. S. Herron, West Point, New York.

DEAR CAPTAIN:—Your letter of the 17th is at hand. I will be pleased to comply with your request and publish the combined letter of Scott, Howze, Marshall, Traub and your-

self, and also to send copies of it for comment to the several cavalry garrisons.

As to my remarks in the October number of the JOURNAL, you will notice that they follow as comments on Walsh's article on "Remounts," and refer to the extract from General Aleshire's annual report as published in the army papers, in which his scheme for a remount system was not given in full. His article was not received here until after Walsh's paper and the comments on it were in print, and in fact not until all of the first part of the October number was in print or being set up.

Upon its receipt, I saw its great importance, and at once called up our printer and had him "kill" the last article being set up—at some little extra expense—and replaced it by General Aleshire's admirable paper, and by doing so delayed getting out the number a few days, as we had to wait for the plates.

Now, as to my comments, I certainly had no intention or thought of speaking the views of the cavalry, and intended only to give my personal opinion that cavalry remounts should be selected and trained by cavalry officers. It is of course my desire to make the CAVALRY JOURNAL what the cavalry officers want it, and to express their views, and to that end will welcome any suggestions or criticisms of my work as editor. It is new work to me, and I expect to make many mistakes, and it may be necessary to put up a sign in the office similar to one in a Leadville dance house: "Please do not shoot the fiddler; he is doing the best he can," substituting "editor" for "fiddler."

Very truly yours,

(Signed,) EZRA B. FULLER,
Lieutenant Colonel U. S. A., Retired
Editor.

On the receipt of Captain Herron's communication of October 17th, a circular letter was sent all commanding officers of cavalry garrisons, giving copies of the above letters and requesting that they "Please comply with Captain Her-

ron's request and obtain the views of the cavalry officers at your post as to the point in question."

The replies received up to the time of going to press are given in full below, omitting, to save space, the headings and signatures:

From Major H. T. Allen, Eighth Cavalry, Fort Yellowstone:

"Referring to your recent communication relating to the proposed plan of General Aleshire, I beg to state that the officers of this post unanimously approve the remount plan recommended by the Quartermaster General. We believe that it is the longest step in the right direction within the limits of possible early accomplishment."

* * *

From Captain E. L. Phillips, Thirteenth Cavalry, Fort Myer:

"Complying with your circular letter of October 25th, I have submitted the question at issue to the fifteen officers of cavalry stationed at this post. Of these, eleven were disinclined to express an opinion in the matter, while the other four were in favor of having the remount bureau under the Quartermaster General.

"So far as I can judge, the unwillingness of the majority of the cavalry officers here to express an opinion either one way or another, is due, in some cases, to a feeling that they would prefer to carefully consider the question and hear the arguments for each side before coming to a definite conclusion. But there is, unquestionably, a strong feeling here that the present Quartermaster General, as an ex-cavalry officer and one whose experience in the purchase of remounts has been exceptionally wide, is peculiarly qualified to handle the work. And as his proposed remount system contemplates placing the actual purchase and handling of the young remounts in the hands of cavalry officers especially selected and detailed in the Quartermaster Department for the purpose; and as there is, at present, no Chief of Cavalry or other

departmental head under whom the remount depot could be placed; the disposition of the majority of our officers seems to be to accept General Aleshire as the logical one to develop and put in operation a new system of remount purchase and handling; and they are disposed to accept his plan as one that will work admirably under present conditions, and as being the best thing to advocate and support at the present time.

"Of course, if, in future years, good fortune should give us a Chief of Cavalry, and changed personnel and new conditions should make it seem desirable, this system once fully developed could be transferred to another department without difficulty."

* * *

From Major Charles Taylor, Thirteenth Cavalry, Fort Leavenworth:

"In response to your circular letter of the 25th ultimo, I take pleasure in informing you that I have talked over the subject of 'who should have charge of the remount division of our army' with the officers of my squadron, and the consensus of opinion is that you are right and that the same should be in charge of competent mounted officers rather than entrusted to the Quartermaster Department entirely.

"There is no doubt but the scheme proposed by General Aleshire could be satisfactorily carried out by the Quartermaster Department in absolute control, so long as General Aleshire remained at its head. But, suppose the General is succeeded by a man ignorant of the subject involved, or lukewarm or hostile toward the mounted arms of the service, as some are, all the fruits of General Aleshire's labors might be lost.

"We believe that there should be a Chief of Cavalry, and under his supervision the remount depots could be operated with entire success.

"The contract system is strongly condemned, being a waste of good money and unsatisfactory in its results."

From Colonel McClernand, First Cavalry, Fort Clark :

"I have just returned from leave. Your note was received last night. Our baggage is to be shipped from Spoford (nine miles by wagon) on the 15th, and it is impossible for us to take up the subject of remounts at this time."

* * *

An attempt was made to obtain the opinions of the thirty-five cavalry officers on duty at the schools at Fort Leavenworth, but only a few of them could find the time to read the correspondence and submit their views on the question.

Of those who did look over the papers, three expressed themselves verbally as concurring in the opinion given by Major Taylor and the others as follows :

* * *

Captain H. R. Hickok, Fifteenth Cavalry :

"General Aleshire's plan is in itself excellent. It is infinitely superior to the one, or lack of one, now followed. General Aleshire has the advantage of being on the spot, in Washington, where legislation and other things are done. He is the head of one of the great departments, and, aside from the fact that his opinions, due to his high reputation, are worthy of consideration, his official recommendations carry great weight. There is not now in Washington anyone who will probably give as much immediate attention to this subject as General Aleshire. There is the further advantage for his plan—a department already organized is behind it to put it into effective operation whenever it may be granted. It is, therefore, manifest that the best present policy for us is to lend every assistance to General Aleshire in his proposed plan for our benefit and improvement.

* * * * *

"The following may be said in summing up :

"1. A remount system is sorely needed, and that proposed by General Aleshire is excellent.

"2. The supervision of the remount system properly reposes in a Chief of Cavalry, but we do not yet have a Chief of Cavalry.

"3. The best present policy is to favor the system proposed and to lend our voice toward its procurement.

"4. The transfer of the supervision of the remount service from the Quartermaster's Department to the cavalry or Chief of Cavalry, is a question best left to the future."

* * *

From Captain J. C. Raymond, Second Cavalry:

"As I understand it, the main point upon which opinions differ on General Aleshire's remount scheme is whether the officers to be detailed on this duty should be of the cavalry (and field artillery) or the Quartermaster's Department. I believe with you and with General Carter, that the remount bureau should be composed of cavalry and field artillery officers under the supervision of the Chief of Cavalry (when we can get one), leaving the supply of transport animals to the Quartermaster's Department."

* * *

From Lieutenant H. L. Hodges, First Cavalry:

"General Aleshire's plan for a remount system should receive, at this time, the unanimous support of all cavalry and light artillery officers, for it will prove an excellent stepping stone towards the ultimate establishment of a "Cavalry Bureau" under the direction of a Chief of Cavalry. The Civil War showed a "Cavalry Bureau" to be the logical and economical method of handling the horse question."

* * *

From Captain C. E. Stodter, Ninth Cavalry:

"I believe General Aleshire's plan is a long step forward, but I agree with you that it should be one of the branches of the office of the Chief of Cavalry when we get one. It would

probably work well under the present Quartermaster General, but might not under his successor. I am opposed to the contract system of buying horses."

* * *

From Lieutenant L. S. Morey, Twelfth Cavalry:

"I have read the correspondence on the remount question and am of the opinion that General Aleshire's idea could be more easily put through than any without making a radical change in the department which should handle the remount depots. Major Taylor's letter is good on the subject, but why not get what we can be most sure of now, and look to the future for further change?"

* * *

In addition to the above, the following has been received on this subject, although not in reply to the circular letter:

From Major J. G. Galbraith, Inspector General:

"The undersigned is the author of the enclosed communication, which was published in the *Register*. If you will refer to the files of the CAVALRY JOURNAL of about the year 1895, you will find that I was at that time a critic of the methods of the Quartermaster's Department, and my argument was along lines similar to those lately set forth in the JOURNAL.

"But since the 1st of July, 1907, the situation has undergone a radical change, and we have more to gain by helping the Quartermaster General than we can hope to accomplish by stubborn insistence on our own way.

"I would request that the clipping be inserted in the CAVALRY JOURNAL."

CAVALRY REMOUNTS.

[From the *Army and Navy Register*.]*To the Editor:*

SIR:—However desirable may be the establishment of a cavalry bureau or the installation of a Chief of Cavalry, it need be no part of the former to supply horses, nor duty of the latter to supervise disbursements. Far-reaching as has become the influence of the office of the Chief of Artillery, it has not trenched on the supply departments of the army. The Quartermaster's Department is designated by law to procure and distribute public animals for the army. The present head of that department has outlined the best scheme yet presented, and there is good reason to believe that he is better qualified than any one else to put it into effect. He has under him an organization that will not be embarrassed by the task, but is accustomed to meet such situations. He is receptive of suggestions from cavalry officers and has had sufficient experience in the cavalry. The development of his plans will require money from the Congress; and his request for the necessary appropriations will the more readily be heeded by our legislators if it is not antagonized by officers of the mounted services. I venture to say, on my own authority only, that his scheme will not be presented to the next Congress if a rival proposition is to be put forward by others claiming to represent the cavalry. Is there any considerable number of cavalry officers who desire to be organized into a purchasing bureau that would grow into a large concern in time of war, with the certain prospect of keeping them away from the combatant ranks? I think not.

The Quartermaster General can have under his control some officers of cavalry experience who will be either permanent or detailed officers of the Quartermaster's Department, and who will properly be available and can be compelled to serve as purchasing officers and in charge of horse depots.

On the outbreak of war if there be in existence a cavalry bureau or an office of Chief of Cavalry, we may anticipate that it will be stampeded into the field and to the front. The Quartermaster's Department will be held together and can be expanded and reinforced from other than combatant

sources. In the minds of many cavalry officers, the contract system is inseparably associated with the Quartermaster's Department; and their distrust of the ability or inclination of that department to break away from that system has much to do with the movement to establish a cavalry bureau. The published program of General Aleshire recognizes the unsatisfactory features of the contract system as applied to the purchase of horses for the cavalry, and contemplates resort to open market buying whenever that method may be the more advantageous.

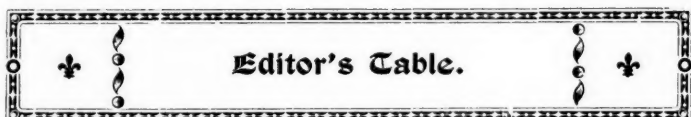
Why not strengthen his hands, give him united support and encouragement, and help to obtain a fair trial for his scheme?

EQUES.

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As the above was going to press, a communication was received from Captain Herron with the signatures of fourteen other cavalry officers on duty at West Point, who concurred in the views given by Captain Herron and the others who signed the original letter.

EDITOR.



Editor's Table.

WHAT OUR MEMBERS WANT.

On the blank forms prepared for our members in sending in their proxies for the next annual meeting, was a space for suggestions "for the improvement of the JOURNAL or the advancement of the mounted service generally." The suggestions on the proxies received up to date are so varied and so interesting that a few will be given and discussed.

Many members say "Get a Chief of Cavalry." This is easier said than done, but at the same time it is believed that something is being accomplished toward that end as a result of the agitation that has been carried on by the JOURNAL. At the last meeting of the Executive Council a committee was appointed, consisting of Major D. H. Boughton, Eleventh Cavalry; Captain M. F. Steele, Sixth Cavalry; and Captain M. E. Hanna, Third Cavalry, to prepare a report on this subject to be submitted at the annual meeting of the Cavalry Association. It is hoped and believed that this committee will formulate a report covering the best method of procedure, by preparing a bill or otherwise, which, if it meets with the approval of the Association, can be submitted for the consideration of the War Department authorities for their action. In case the Department can be persuaded to favor the proposed scheme a long step in the right direction will have been taken, and it will then only remain to get favorable action on the part of Congress, if Congressional action is necessary. The President in his annual message says: "There should be a Chief of Cavalry just as there is a Chief of Artillery."

Any of our members who have suggestions to offer on this question, are requested to communicate with this committee.

Two of our members suggest that an improvement be made in the binding of the JOURNALS, so that they will remain open when opened at any place. This fault, and it is one to a certain extent, is common to all magazines that are wire stitched instead of being sewed. An examination of the many magazines of both classes will show, first, that all that are sewed are high priced; and, second, that the sewed ones come apart more readily than do those that are wire stitched. This question of the binding of magazines was discussed a few years since in *Munsey's*, and later, in the *Ladies' Home Journal*, and it was claimed by the publishers of these journals that no low priced magazine could afford to have its publications sewed even if it was thought advisable to so bind them.

Several members have requested that we have an enlarged plate made of the Remington drawing on the front cover of the JOURNAL, in order that proofs might be made from it for sale to members. This can be done, and, in case a sufficient number of orders are received to justify the expense, an enlarged plate will be made.

Another member says: "Give more translations from foreign journals of articles on cavalry subjects." This member will find this number largely made up of such translations, and necessarily so, as the number of original articles on hand were very limited when we commenced going to press on this number.

Among the other suggestions received are the following: "Urge the adoption of a definite and compulsory system for training remounts;" "The adoption of a prescribed course in equitation;" "Better pay;" "One hundred enlisted men to each troop of cavalry;" "The adoption of a double-reined bit and a saddle with a higher pommel arch and longer side-bars;" "Place all officers on detached service for six months or more on an unassigned list;" "The detail of more officers at foreign schools to study the languages, and incidentally to pick up ideas regarding the cavalry service;" "Go back

to the system of regimental promotion and thereby again foster a regimental esprit ;" "Publish the JOURNAL oftener;" "Have the cavalry supplied with the cal. 45 pistol and a sharp saber;" "Publish schedules and programs of instruction at the service schools so as to enable those who cannot attend these schools to follow the course as much as possible;" "No test rides, but in lieu thereof have a physical examination of all field and general officers every two years;" "Longer enlistments with the privilege of discharge after one year;" "An increase of five regiments of cavalry, and if this is not possible in any other way, get it through a reorganization as suggested by Major Boughton;" "Publish cavalry or hunting songs."

A member, one of our colonels of cavalry, in discussing the subject of better pay for the army, but more especially for the enlisted men, makes the following very pertinent and correct remarks: "I certainly hope the part which affects the enlisted men will pass, though I do not expect that the increase will effect any wonderful change in the enlisted personnel, or that it will have much effect upon the number of desertions. Whenever the government decides to take as much trouble to apprehend deserters as is taken to arrest moonshiners and counterfeiters, desertions will practically cease. The certainty of arrest would be a far greater deterrent than severity of punishment, though that should be equal to the crime. It is certain, in my opinion, that the causes of desertion do not lie in the service itself, and therefore an increase of pay and other measures of like character will not be effective so long as deserters are practically without fear of arrest."

Of those who voted on the proposition to unite with our friends in the field artillery and publish one journal for both branches of the service, about seventy per cent favored such an idea in one form or another. However, as stated in the October number of the JOURNAL, this proposition will probably never come to a vote in the Association, as the field artillery officers have decided to form a separate association and to either publish a separate journal or to have a portion of the *Artillery Journal* devoted to their interests.

OUR BOOK DEPARTMENT.

We regret that there has been an unexpected delay in publishing the work of Captains Cole and Stuart on "Individual and Combined Military Sketching." This delay is due to a failure in receiving a portion of the revision and the plates, and was through no fault of the Cavalry Association. The book is now being printed, and it is expected that we will be able to commence filling the already quite large list of advance orders soon after this number of the JOURNAL reaches our readers.

* * *

It has been suggested that the JOURNAL publish a standing list of the best books for an officer's military library, this list to be revised from time to time so as to include the latest works. It is proposed to make this list in groups so as to include the best ten books, the best twenty books, etc., the smaller lists to include such works as are absolutely essential for the officer just joining, and the expanded lists to comprise those that are desirable but not strictly necessary. We hope to have such lists ready for the next issue of the CAVALRY JOURNAL, and in the meantime will welcome suggestions on this subject.

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Although it was promised that Frederick McCormick's book on "The Tragedy of Russia in Pacific Asia" would be out early in October, we have not been able to fill the orders received for it as yet. The publishers write that this work will be issued in a very few days.

* * *

The Association has just published the third edition of Captain Stodter's Score Book. The demand for this handy score book still continues.

* * *

Attention is invited to Captain Rhodes' review of "The Campaign of Santiago de Cuba," by Captain Sargent, which appears in this number. This book is attracting even more

attention than did the previous works by this author, and the reviews and press notices of it are extremely flattering. The publishers write us as follows regarding this book: "The Campaign of Santiago' is receiving very general praise from army and navy authorities, and within a few days we have been advised by the Bureau of Equipment of the Navy Department that the three volumes will be placed in the officers' libraries of all the ships that may be fitted for service hereafter. Individual orders have been received from army and navy officers all over the country, and the work bids fair to become the authoritative one on the subject."

* * *

The Cavalry Association has undertaken the handling of the "Officer's Manual" by Captain James A. Moss, United States Army, and is now prepared to fill orders of individuals, post exchanges or dealers.

The second edition of this book has just been published, the first having been exhausted in four months. It is a work that should be in the hands of every young officer, and older officers as well, and is invaluable to the officers of the National Guard.

Hereafter, a supplement to this book will be issued the first of each year, which will bring it up to date.

THE SERVICE JOURNALS.

An article on the subject of the casualties among horses in the Russian army during the campaign in Manchuria appeared in the last *Austrian Cavalry Monthly*. The following extract from it is taken from a translation that was published in the *Broad Arrow*:

"Russia sent a total of 203,679 horses into the field, and of these rather more than half were draught animals. During the twenty months that the war lasted the sick amounted to fifty-nine per cent. of the total, while 23,068, or eleven per cent., died, were killed, or were missing, and of these only

3701, or under two per cent., were actually killed in action. Of the sick horses, sore backs, as might be supposed, accounted for a large number, and there were 2263 cases of glanders. Only 1159 horses died of wounds received in action. Three hundred and seventy-seven veterinary officers and 1546 assistants were sent into the field, and the majority were employed in the sick-horse depots and hospitals. Each corps had a base veterinary hospital, to which a staff of seven officers and forty men were attached. There was a great dearth of straw for bedding in the hospitals and even of horse medicines, rugs, etc., and the *sorghum* and Chinese millet, given as forage, produced in many cases colic, which terminated in fatal bowel complaints. Every horse was inoculated before leaving Russia and again on arriving in the field, no less than 676,130 doses of serum being required. The veterinary officers with the troops were further responsible for the freedom from infection of all the slaughter cattle required for the troops, and which were collected from Corea, Manchuria, and Mangolia, and every one of these had also to be inoculated against rinderpest. It is thus apparent that the Russian veterinary surgeons had an immense amount of work and responsibility during the campaign."

* * *

The *British Cavalry Journal* for October has the usual number of interesting and instructive articles on cavalry topics. While the historical ones of "The Action of Campo Mayor" and "Balaklava" are of interest, those on "The Increased Importance of Training Cavalry in Mobility," "The Dismounted Action of Cavalry," "Notes on Scouting," "Cavalry Efficiency" and "Cavalry in the Russo-Japanese War" are of greater importance to the modern cavalryman. Besides the usual maneuver problem, the other articles are: "The Native Cavalry of India," "Scottish Mounted Maneuvers," "Cavalry Swordsmanship in 1854," and "How to Hit Your Man with a Pistol."

* * *

The *Austrian Cavalry Monthly* for November has been received and contains, among others, the following articles: "Strategical Reconnaissance in the Past and Now," "The Cavalry Screen," "The Training of Cavalry," "The Danish School of Equitation," "The German Remount System," "Lessons in Hippology" and "Oliver Cromwell as a Cavalry Leader."

* * *

The *United Service Gazette* has the following on the shortage of officers in the British army: "The shortage of officers is the one thing that threatens to seriously affect the prospects of the new territorial army, and to cast the same blight on it that is now sapping the vitality of the regular army, and compelling the authorities to resort to all kinds of subterfuges in order to maintain the fixed establishment of officers of the line. The reason for this lies on the surface. The officer at one time was attracted to the army in the hope of carving out a career for himself with the sword. Provided he possessed all those splendid qualities that go to make up the true soldier, and that have won respect for the British name in every corner of the globe, but little more was needed, and such routine duties as he was called upon to perform in peace time did not tax him so severely as to make his profession anything like a burden to him. But the times have changed much since then, and professional exactions have, in later years, increased so rapidly that the officer finds them simply unbearable in their demands. Moreover, examination tests have become more severe, and entail an amount of close study and investigation which, if applied to a commercial life with a corresponding degree of earnestness and steadiness, would, of a certainty, win success in a business career. Young men are learning this lesson rapidly, and realizing that most of the prizes of life go nowadays to successful business men, while the soldier's life grows daily more exacting, without any corresponding growth of remuneration, the majority of them are eschewing the military career in favor of more lucrative and less arduous work in the city. Until the country grows more

liberally disposed towards the officer, and learns to appreciate his work more fully, the cry of 'shortage in officers' must increase in measure rather than diminish."

* * *

The *Journal of the Royal United Service Institution* for October contains but one article relating to the cavalry service, one continued from the previous number and concluded, on the passage of rivers by small bodies of mounted troops. Other subjects of general interest are: "Education in Relation to the Army," "The Military System of the Future in the British Army," "Wars of the Turks with the Germans" and the "Battle of Tsu-Shima."

* * *

The *Journal of the U. S. Infantry Association* for November has the following leading articles: "Experiments with the Cavalry Buzzer," "Collective Fire in Target Practice," "Practical Field Work in Musketry," "The Increased Value of Infantry Fire," "Recruitment, Mobilization and Concentration," "Effect of Abolishing the Canteen," and "New Light on the Campaign in Canada in 1776, and Burgoyne's Expedition in 1777."

* * *

The *Journal of the Military Service Institution* for November contains: "The American Citizen vs. The American Soldier and Sailor," "Left of the Line at Wilson's Creek," "Mounted and Dismounted Action of Cavalry," "Organization of a Military Reserve," "The Trumpeter and Trumpet Calls," and "Points of Interest to Riflemen."

* * *

One of the most valuable of all of our exchanges is that of the *Journal of the United Service Institution of India*. Among its most interesting and instructive articles are: "The Use of Intrenchments and Field Fortifications in the Attack as Exemplified in Modern Wars" (Gold Medal Prize Essay), "The Relative Value of Musketry in Military Training,"

"Intrenching Tools for Infantry," "Universal Military Training as a Substitute for the Volunteer System," and "The Cavalry of the Grand Army in 1805." The following quotations are from this journal: "The nation must depend on the patriotism of its citizens, but it must be the patriotism of forethought, prudence and preparation, not the emotional sentiment aroused when the enemy is at the gate."

"From the fact that but little use was made of cavalry in South Africa and the Far East it has been said that cavalry is not worth much in the campaigns of to-day. This is, however, a great error. In both these wars had cavalry only been available ordinary defeats might have been converted into decisive routs. Modern war has need of cavalry more than ever—a cavalry which is numerous, pushing and ubiquitous. They must undertake the service of exploration and make use of modern inventions, such as telegraphy, wireless telegraphy, heliographs, etc., to submit safely and accurately the information which they have gained. Above all it must be remembered that the cavalry must defeat the opposing cavalry and clear the field. Whether this is accomplished in mounted combat or on foot depends on circumstances. Horse artillery should accompany all the larger cavalry detachments. Cavalry is and must remain the eyes of the army."



"I speak the truth, not so much as I would, but as I dare, and I dare a little the more as I grow older."—*Montaigne*.

* * *

Military History Applied to Modern Warfare.* In recent years the importance to military men of the study of military history has been overshadowed by what has been considered a more practical method of acquiring a knowledge of the art of war; namely, a study of theoretical treatises on strategy, logistics, tactics, etc., combined with the solving of map problems and terrain exercises and the working out of *kriegspiel* and maneuver problems. The pendulum is now swinging back, however, and it is being recognized in both Germany and England that a sound military education must be firmly rooted in a knowledge of the campaigns of former wars. In Germany the wars of '66 and '70-'71 are naturally the first studied, as the materials are the most accessible, the railways play the part

*"MILITARY HISTORY APPLIED TO MODERN WARFARE." A guide to the study of military history exemplified by studies of the campaigns of Austerlitz, Jena, Vimiero, Corunna, Salamanca, Waterloo and the Shenandoah Valley, by the late Captain J. W. E. Donaldson, R. F. A., P. S. C. Second edition; revised and enlarged by Captain A. F. Becke, late R. F. A. Hugh Rees, Ltd., London (The Pall Mall Military Series). Price, 8s. 6d., net.

in these wars that may be expected of them in future wars, and the outcome of these wars is highly flattering to national pride. Nevertheless, the Germans by no means neglect the study of earlier campaigns, including those of both Frederick the Great and Napoleon, and it may be said of the latter that they are more studied (from a military point of view) and better understood in Germany to-day than they are in France. Motives of patriotism lead to the investigation of wars which have contributed to the upbuilding or advancement of one's own country, and hence the English quite naturally take a pride in studying the campaigns in the Iberian Peninsula and of 1815 in which their own forces contributed so largely to the weakening and final overthrow of the power of Napoleon.

This volume gives a critical outline of seven campaigns, with a view to illustrating the manner in which military history should be studied in order to derive benefit therefrom and also to point out the particular lessons applicable to modern warfare to be gained from a study of these operations. In his accounts of the campaigns of Austerlitz, Jena and Waterloo, the author accomplishes both his objects in a masterly manner. The campaigns of Vimiero, Corunna and Salamanca are hardly as well digested as the others. In these the author attempts to cover too much ground in a short space to be either clear or convincing, while at the same time one feels that the operations of such comparatively small bodies of troops, armed with weapons of obsolete type and really partaking rather of the nature of guerilla warfare, have after all but little bearing on the modern art of warfare.

The concluding narrative and criticisms of Jackson's Valley Campaign, in which an attempt is made to describe, and characterize the strategy of the movements of all the armies in the Eastern theater during the first two years of the war, is disappointing. The author falls into all the errors so prevalent among writers on the Civil War before the publication of the war records and other important sources made possible a correct understanding of these campaigns. The time has passed in this country when a writer on the

Civil War can calmly ignore the facts contained in the sources of its history, which are or should be available to everyone, and that an English author should attempt to give a critical discussion of an important campaign based on popular histories and biographies, nearly always partial accounts, is only interesting from a psychological standpoint and as indicating the popular misconceptions regarding our Civil War campaigns prevalent among English military men.

The chief value of the book, however, lies in the method by which the author draws up-to-date lessons from the campaigns of the past, and while we may not feel that he has brought out more than a few of the many lessons to be learned from his study, or may not agree with him at all as to what those lessons are, yet we must admire him as a pioneer in his own country in bringing forward a subject, the study of which has been too long neglected, and overlook the imperfections necessarily to be expected in preliminary work of this character. We hope to see a further development and application of this method, so justly appreciated in Germany, the importance and value of which must be apparent to anyone who gives the subject more than cursory and superficial consideration.

A. L. C.

**Administration,
Organization and
Equipment
Made Easy.***

This is a good book for those that like that kind of book. We suppose that under the English system of promotion examinations some such book is practically a necessity. The information that English officers must possess to pass successfully their promotion examinations in the subject of organization and equipment is contained in a vast number of official books of regulations, etc. To save officers the trouble of referring to all these different books, this manual of examinations, as it might be called, has been prepared by Colonel Banning.

*"ADMINISTRATION, ORGANIZATION AND EQUIPMENT MADE EASY." By Lieutenant Colonel S. F. Banning. Seventh edition. Gale & Polden, 2 Amen Corner, Paternoster Row, E. C. London. Price, 4s. 6d.

The fact that this seventh edition has just been brought out, it having been only eight years since the first edition, shows how valuable the work is to English officers.

The book is of some use to foreign officers because with some little study they can learn something about the English army organization. But as with all manuals, the information contained therein is really a sort of hotch potch, and must be supplemented by something more definite before any fair amount of information can be gained.

As for the use of such books in our own army in preparing officers for examinations, we believe the necessity of their being is small. Of course, we have some works similar in character to this book of Colonel Banning, and we generally call them catechisms or syllabi of such and such subjects, as for instance, "Catechism of Outpost Duty," or "Syllabus of Davis' International Law." But personally we have never yet been able to make any great use of such compilations. It has always seemed to us that the best way of preparing for an examination in a certain book is to take the book itself and just prior to the examination make our own outlines and analyses. They are certainly far better for one's own use than those made by any one else. If one is at all familiar with a book he knows the parts he needs to brush up on, and he can do that brushing up himself far better by his own methods than by the compilations or consolidations of others.

While we are on this subject of examinations, we wish to speak of another point, and that is in regard to the methods of asking questions. Examiners are too prone to ask questions involving tests of memory rather than tests of reasoning. The uselessness of such examination is patent. To explain more definitely what is meant, let us take a concrete illustration—one from the subject of "Organization and Tactics":

On page 133, Wagner, we find under the head of "Cavalry Against Infantry," the following: "Cavalry can be used with effect against infantry under the following circumstances." Now follow ten headings.

Each of the headings is plain to anyone who has given the matter any thought, and each one of the conditions can

be explained by an officer undergoing an examination to the satisfaction of the most critical board if he has almost any sense at all, and has made some study of the question. But now take the ordinary question; it will be something after the following: "Under what circumstances can cavalry be used effectively against infantry?"

Now, to get a maximum on the answer, the officer undergoing examination must remember each one of the ten circumstances given on page 133, and put them down on paper. This is pure memory work, and absolutely nothing else. Of course, this is an easy way to get up examinations. It is easy to mark the papers when turned in by making a cut of ten per cent. (there being ten circumstances) for each circumstance omitted. Should the marker ever be called to explain his mark, he can say: "Well, I deducted the proper percentage. This paper gives only six conditions out of ten, and so the paper gets sixty per cent. on this question." There is, of course, no recourse, as the marker has it in black and white on the paper, and yet there has been no actual discriminating test of the officer's knowledge of this subject. This is not only the laziest method of conducting examinations, but it is one of the most pernicious. It gives the officer no chance of showing whether he knows anything of the chances of success or defeat that are likely to attend an attack of cavalry on infantry, and simply makes of him a memorizing machine. It gets our officers into a method of studying for examinations that is faulty to the highest degree, and the sooner we quit having such promotion examinations the better.

How much better would be a system where we took the officer and said to him: "Lieutenant So-and-so, our best military writers say that cavalry can be used effectively against infantry when the infantry is broken by the fire of opposing infantry or artillery. Why is this?" And so on for the ten circumstances given. Unfortunately this method entails more work, and so the former is adopted. Examination boards should be carefully watched, and the minute any board descends to the pernicious method of asking questions that call for memory power and not reasoning power, that

board should be dissolved and a fitting rebuke administered in such public way that other boards will be slow to adopt such methods.

We do not wish to say that such methods are adopted in general throughout our service, but it is such an easy method to drop into that constant vigilance must be maintained to guard against such unfortunate proceedings. Any officer coming up to an examination should feel that it is not so much what any one particular book has to say on a given subject that is wanted, but that the board must be made to understand that the officer has been spending some time on the study of his profession and that he has sufficient mental ability to appreciate the things he has studied and can apply them to circumstances when they arise.

In regard to Colonel Banning's works, we take this opportunity to again call attention to one of his revisions that was reviewed in the *CAVALRY JOURNAL* in the issue of January, 1906. We refer to his revision of Captain Davidson's "Catechism on Field Training." That was a book that is far superior to its title. It is almost a classic as far as working with it is considered. And it has always seemed to us that a careful system of training on the lines there laid down would make our enlisted personnel appreciate the fact that they belong to a profession, and would eliminate much desertion, and also keep all men as non-commissioned officers that we care to retain. Attention is invited to that review, and we can safely state that any officer having that book in his possession for a sort of rude guide will find it one of the most valuable military books ever published.

WHITE.

**Cavalry
Studies.***

An absolutely new and valuable book on the handling of cavalry in modern warfare written along the lines of the applicative system of teaching the art of war. It helps to answer the questions, How shall an officer make himself a good soldier? How shall he learn to lead men in campaign and battle? To be sure, military men study their profession and read the campaigns of the great leaders. None are more zealous. At the same time it must be admitted that not enough attention has been paid to the *method* of study or reading. By study and reading a man may become learned but not necessarily wise or practical. One may know the grammar of a language and still be unable to converse. So, too, he may be familiar with the great campaigns and battles, be able to talk fluently of the cause of this success or that failure, and still be unable to lead men, or solve strategical and tactical problems in the field. Education is an art, and the best methods are those that produce the best artisans. That our educators are now realizing this fact is evidenced by the increase in the number of manual training schools and similar institutions where the young are taught to work as they will in after life. This is experience, the best of all teachers. Education is of little value to men unless it makes them practical. In the army we have been groping along the way because the way was dark, because *we did not know how to study*, how to make the experience of others the working tools of our own profession. We have been content with theory, not realizing that the theories of others are of little use to us unless we make them our own, which can be done only by testing them ourselves.

General Haig has produced a work based upon the applicative system of instruction, a system that can be summed up in the word, "problems"—a system that continually confronts the student with "situations" and asks him what he is going to do about them. Reading descriptions of campaigns and battles is not enough. The student must

*"CAVALRY STUDIES, STRATEGICAL AND TACTICAL." By General Douglas Haig, late inspector of cavalry in India. Hugh Rees, London S. W., 1907. Price, 8s. 6d., net.

be made to solve problems himself. In this way alone can he be brought to realize his own deficiencies. As the author says, it is *leadership* that tells. The power of rapidly grasping a situation, of coming quickly to a decision and of issuing clear and easily executed orders. This faculty more than any other brings success to the commander in the field. The development of this faculty ought to be the main objective in the training of combatant officers in time of peace, and close attention should be paid to all exercises which tend to develop a power of decision and skill in quickly drafting orders. Military history is all-important to an officer. It shows the great masters at work. We learn from their experience and become acquainted with the difficulties to be encountered in applying principles. But such work contributes little towards developing our powers of decision. On the other hand, *war games* and *staff rides*, properly conducted, are practical teachers.

This new contribution to the art of war is the outgrowth of five cavalry staff rides held in India during the years 1903-6, personally conducted by General Haig. These rides were held under favorable circumstances, as India is especially suitable for such exercises. The winter climate is ideal for outdoor life, the country is diversified, and troops can march and camp as the military situation may require. Moreover, the director was fortunate in having a number of skilled officers, not only on his directing staff but among those receiving instruction as well, who had had practical experience in various parts of the world. We should therefore expect the conclusion of these gentlemen to be in accord with correct tactical and strategical principles.

To present the results of these rides in a manner that would be interesting to those not taking part therein, it was necessary to remodel the original reports, which work was intrusted to Colonel Lonsdale Hale. The result is a book not only of interest and value to cavalry officers, but to all others desirous of understanding the proper use of that military arm. The first four rides are presented in the form of *studies*; the fifth is given practically in its original form, the "estimates of the situation" and orders being those of the

officers in the field. The purpose of the book is to exemplify, primarily, the functions of an independent cavalry division, and secondarily, the tactical uses of this arm under a variety of conditions. Each study is based upon a general situation out of which a campaign is skillfully developed. The situation is carefully estimated (the British say appreciated) and the proper field orders drawn in a manner almost identical with similar work in our School of the Line and Staff College.

In the introduction the general rôle of cavalry is considered. The second chapter gives the organization of the Indian cavalry division, calls attention to the fact that the *studies* are intended to make officers think for themselves, and gives examples of certain orders. Field orders with the British are called operation orders. Then follow the studies. The first is called Jhelum (river in northwestern India) and has for the general subject the work of a cavalry division in an invasion on a double line of operations across a river frontier, and up to and including the first decisive battle. In short, concentration in the presence of the enemy. The second study is called Delhi and treats of the employment of independent cavalry divisions in following a defeated hostile army. In this the author points out the similarity of the country around Delhi to that in the vicinity of Metz, and calls attention to the meager results obtained from the German cavalry in 1870-71. The third study is called Aurangabad, and treats of the employment of the cavalry division and of the army cavalry up to the "decisive battle, the real objective in war." In this are considered the strategical preparation, selection of primary and secondary theaters of war, the use of intrenched depots (illustrated by Napoleon's campaign of 1809), and measures to be taken in regard to a buffer state. The fourth study is called Medak, and is a continuation of the third study, but considers the secondary theater of operations. Then follows the Attock staff ride illustrating the employment of strategical cavalry to cover the concentration of an army on an enemy's flank. This is prefaced with notes on the campaign of Ulm in 1805.

While the leading subjects treat of the strategical employment of cavalry, the development of the *studies* is made

to illustrate its tactical uses and other features which should be familiar to officers. For instance, the first study discusses: Reconnaissance of and advance to meet hostile cavalry in open country; cavalry mounted action; pursuit; occupying a line of outposts to contain an enemy; passage of a river; should infantry ever be attached to a cavalry division? use of artillery; cavalry coöperating in the great counter stroke, etc. On page 265 the difference between Napoleon's and Von Moltke's staff systems is commented upon. It is interesting to note that the ultimate base of the enemy in all of these rides is supposed to be in Europe beyond the Caspian.

On page 108 the manner of handling independent cavalry on reconnoitering duty is pointed out:

"This reconnoitering body will, in the course of its operations, be at least a long day's march in front of the rest of the division, and in view of its independent rôle and the unforeseen which characterizes its mission, it should have a 'central mass' of some strength. This mass must be able, according to circumstances, to send out several sets of reconnaissances in different directions, and either to support them directly, or to send detachments of sufficient strength to their support."

The "cavalry screen" is condemned and justly. Page 155:

"A force of cavalry which is employed on strategical reconnaissance will not have to extend as a dense and continuous screen across the whole front of an army (or armies), as has too frequently been maintained. Such dispersion, without giving it penetrative power and strength at any one point, would leave it morally and materially weak everywhere, and incapable of making any useful effort."

Again on page 277:

"(a) First of all make a few soundings with patrols; then, as the situation develops, send out more; (b) keep in hand, covered by patrols, the mass ready to strike when the

situation is favorable. Even nowadays these principles are often forgotten, and squadrons are scattered, as in the so-called 'screen' formation."

Again, speaking of the campaign of Ulm:

"There was no 'cavalry screen' put out after the manner suggested by certain theoretical text books with clouds of patrols in front, all arranged with mathematical accuracy. On the contrary, Napoleon's cavalry was kept much concentrated, and *a large mass of it was boldly pushed forward into close contact with the enemy*. Moreover, reconnoitering was kept up by active reconnoitering bodies, not by a cordon of posts of observation."

These lines are quoted to show the character of the work, and also to invite the attention of our officers to the proper method of handling independent cavalry, a subject that has been somewhat befogged by the "screen" idea, and by the term independent cavalry being comparatively new.

In the appendix will be found a series of notes on the work done by officers during the rides; also notes on the organization of a single staff ride, and a number of problems for solution.

The work is supplied with eight general maps and thirty sketches, amply illustrating the various situations. For convenience the maps in the pocket at the end of the book should have the names of the *rides* printed on the outside.

MAJOR D. H. BOUGHTON.

Sadowa.*

This is a study, not an "account," of the campaign of 1866; yet the narration of events, from the mobilization of the Prussian armies to the closing scenes of the battle of Sadowa, is in sufficient detail to satisfy the average student of military history.

The book is in two parts. Part I deals with the mobilization and concentration of the Prussians, and the preparation

*"SADOWA: A STUDY." By General H. Bonnal. Translated from the French by C. F. Atkinson, Lieutenant First V. B. Royal Fusiliers. Hugh Rees, Ltd., 119 Pall Mall, S. W., London, 1907. Price, 7s. 6d. net.

of the strategic defensive, the marches and combat until the armies were united, and the preparation of the decisive battle. Part II is mainly devoted to the battle, which is arbitrarily divided into four phases; this division, together with the author's method of discussing the operations of each of the three armies in turn, greatly simplifies the student's task. There is a final chapter on the causes and consequences of the victory and on the strategy of the Prussian General Staff in 1866.

The operations explained in the text may be easily followed on twenty-one loose maps inclosed in a pocket. The scales of these maps vary from one inch equal about thirty miles to one and one-half inches equal one mile. The large scale maps are of the battlefield and show considerable detail. On all of the maps the troops are represented in a manner that appeals to the eye.

The author says in his preface that the "study is not concerned with modifications, present and past, in armament, but has as its special object the doctrine of the Prussian General Staff in 1866, personified by its chief, Von Moltke." The translator adds: "The object of the author is by no means attained by the mere statement of the Prussian doctrine. A study implies criticism, and criticism requires a criterion. Nearly twenty years of research in the archives of the Napoleonic period have provided the material for this criterion, the 'new French' theory of strategy, as worked out by General Langlois, Colonel Foch and others, but above all, by General Bonnal, in the series *L'Esprit de la Guerre Moderne*. *Sadowa* form a part of this series, and must, therefore, be considered as a study of a particular campaign, not only upon its own merits, but also in the light of a definite theory."

The following are some of the strategical and tactical dispositions that are criticised:

The dispersion of the Prussian armies on the 10th of June. The choice of Gitschin as the point of junction for the Prussian armies. Breaking up corps in the I Army into their constituent divisions which became the real unit of operations. The operations of the Austrians and Saxons

under Clam-Gallas. The work of the Prussian I Army during the week which ended with the capture of Gitschin. The action of the Prussian I Corps at Trautenau. Benedek's methods for covering the deployment of his army on the right bank of the Elbe. Benedek's decision to take up a position June 29th facing the Crown Prince. Moltke's plan of operations formed on July 2d on the supposition that the Austrians were withdrawing to the left bank of the Elbe to take up a position with the fortresses of Josephstadt and Königgrätz on the flanks. Lack of telegraphic communication between the Prussian armies. Prince Frederick Charles' employment of the Prussian Seventh Division on the left of the I Army. The holding of the cavalry and artillery reserves in the rear of the armies. The premature crossing of the Bistritz by the I Army on the day of the battle. Benedek's order for the battle. The failure of the Prussian cavalry on the day of the battle.

While the author does not fear to make trenchant criticisms where he believes they are warranted, yet he is liberal with praise where praise is due. Speaking of the separation of the I and II Armies by a distance of eight marches, when the II Army was authorized by the King to march to the Neisse to protect the Silesian frontier, the author says: "It is incredible that the Chief of the General Staff could have approved this flagrant violation of the best known of all Napoleon's strategical maxims, 'Keep your forces united.'" But he adds: "In the spirit of loyalty Moltke defended with all the weight of his authority a decision which he knew to be mischievous, with the sole object of screening the responsibility of his King and his Princes before posterity. When the mistake had been made, he lost no time in recriminations, but used every effort of his genius to mitigate its evil effects. In the result he succeeded, though not without great difficulty, in directing the Prussian forces so as to converge on a common objective point preparatory to the great decisive battle." But in the very next paragraph, after this acknowledgment of Moltke's genius, he says in forceful language: "Moltke demonstrates in the clearest possible way his misconception of the use of strategic rear

guards in refusing to admit that the Prussian V and VI Corps (forming the nucleus of the II Army) could contain the five or six corps of the Austrian army. 'Even in a strong position,' he says, 'they would not have been able to resist,' as if to give indisputable proof that the Prussians could only conceive of an *unyielding* defense."

Speaking of Clam-Gallas's position at Gitschin, General Bonnal says: "The five routes by which the Prussians could approach joined at Gitschin, and, by taking up a position to the north of the town the defenders exposed themselves to almost certain envelopment. They should, on the contrary, have (a) massed the bulk of their forces a mile or two south-east of Gitschin; (b) placed a strong advanced guard close to the town, with detachments out on the roads from Lomnitz, Turnau and Munchengratz; (c) observed Neupaka and Liban with cavalry, and in this disposition watched their opportunity to act with the mass against the Prussian columns, while the latter struggled with the Austrian advanced guard for room to deploy in the open."

In the comments on Moltke's plan of operations formulated July 2d, we find the following: "Napoleon in the course of his stupendous career committed errors, some say blunders, but in no single document, whether his own letters or in orders dictated to others, is it possible to find a single plan of operations in which the enemy is left at liberty to move during the maneuver in question." But a little further on in the book is this tribute to Moltke: "It was, thanks to Moltke, and to Moltke alone, that the Prussian armies were able to combine their action on one battlefield under conditions of time, space and direction which ensured a brilliant victory."

These are but samples of the broad and fearless but fair-minded criticism with which the book is plentifully filled. It is a valuable addition to the literature in English on the campaign with which it deals.

The Campaign of Santiago de Cuba.* Captain Sargent's wide reputation as a critical student of and commentator upon the campaigns of the great Bonaparte led to the belief that the American public would not be disappointed in the work upon which he has been engaged during the past three years. *The Campaign of Santiago de Cuba*, which appears from the house of A. C. McClurg & Co., in three volumes, is the most exhaustive, convincing, and withal scholarly treatise upon this short but important campaign which has yet appeared from any pen. The simplicity and lucidity of literary style which marked Captain Sargent's earlier work is conspicuous in this, his latest effort; and layman as well as military expert will derive pleasure and profit from its pages.

Critical essays of contemporaneous events are ever difficult; and more especially is this true of *military* events, when the critic is an officer in his country's military service. Be it remembered that even now, forty years after the great Civil War, history is being written of men and events which has never before appeared. Therefore, if Captain Sargent has dealt gently with many sins of omission and commission, with blunders and neglects which cost our little army many valuable lives, and which participants remember with some humiliation, it must be frankly acknowledged that his narrative is dispassionate, conservative, and has the genuine ring of truth.

Volume I takes up the Cuban insurrection, our own declaration of war, the theaters of operations, the strategy of the naval situation, the resources, armies and military situation, and lastly the blockade of Havana and Santiago. Volume II deals with the disembarkation of the American expedition, Las Guasimas, El Caney, and San Juan, and the destruction of the Spanish fleet. Volume III continues with the siege and capitulation of Santiago de Cuba, the re-embarkation of the Fifth Corps, and general comments. Nu-

*"THE CAMPAIGN OF SANTIAGO DE CUBA." By Captain H. H. Sargent, Second U. S. Cavalry. Three volumes. A. C. McClurg & Co., Chicago. Price, \$5.00.

merous appendices serve to make plain the author's sources of information.

It is interesting to learn that during the Cuban insurrection, reinforcements to the number of 217,282 were sent from Spain, while the total number of Cubans under arms during the insurrection was at one time and another 53,774. Briefly the author ascribes Spain's failure to subdue the insurrection, first, to the cordon system ; second, to the defensive method



CAPTAIN H. H. SARGENT.

of warfare; and third, to the lack of Spanish cavalry. "There never was a time during the insurrection," says the author, "when the insurgents, with their lack of organization, poor discipline, and disinclination to concentrate and fight, could have prevented a single brigade of United States cavalry from marching victoriously anywhere in the island. Such being the case, it is plain that if Spain had possessed twenty or twenty-five good cavalry regiments in Cuba, and had energetically taken the offensive and overrun the rebellious parts of the island, she could hardly have failed to conquer."

In discussing the situation of the American and Spanish

naval forces at the beginning of the war, Captain Sargent believes that Spain should have acted strategically on the defensive, leaving her land forces in Cuba and Porto Rico to bear the brunt of the fighting, meanwhile taking up with her navy some strong position where she could protect her own coast cities and threaten those of her enemy, with the strategical advantage of concentrating her forces in case either American fleet crossed the ocean to attack her.

Our lack of information and misinformation in regard to Cuba is accentuated by the following quotation :

"But at the time the American authorities did not know, even approximately, how many troops were in Cuba and Porto Rico. The number in Cuba was variously estimated by the commanding general, Major General Nelson A. Miles, and others, but none of these estimates it is believed were equal to the actual number. On April 12th, the Consul General of Cuba, Fitzhugh Lee, testified before the Senate Committee of Foreign Affairs that there were probably 97,000 or 98,000 Spanish soldiers then in the island, of whom only about 55,000 were capable of bearing arms. General Miles estimated the number at 150,000, which though much nearer the truth, was still about 46,000 less than the actual number."

What a potent argument was this for a General Staff !

The author sums up the American naval strategy of the campaign in a sentence: "An attack on Havana, if Cervera's squadron remained in the Canary Islands, or an attack on Cervera's squadron, if it sailed to the West Indies." Accordingly, the author believes the following general plan, expressed in the form of orders, would have been strategically correct :

First. If Cervera's squadron does not cross the Atlantic, the American army and navy will attack Havana in the autumn. Meanwhile, during the summer the regular troops at Tampa will be held in readiness to make brief incursions into Cuba, for the purpose of supplying the insurgents with food, arms and ammunition.

Secondly. If Cervera's squadron sails to West Indian waters, and is there blockaded in port, the American army will then immediately coöperate with the navy in bringing about the destruction of the Spanish squadron.

Thirdly. If Cervera's squadron is destroyed in the West Indies, and hostilities do not immediately cease, the American army will then undertake the occupation of Porto Rico.

Captain Sargent closes his exhaustive discussion of naval operations, as follows :

"By remaining at Santiago, Cervera gave the Americans the chance of bringing an overwhelming force against him on the battlefield, and of attacking one by one the vessels of his squadron as they issued from the mouth of the harbor. In other words, he allowed the Americans both the strategical and tactical advantages of the situation, thus giving them the opportunity of practically ending the campaign before the greater part of the land force of either combatant had a chance to fire a shot. * * * Cervera had a clear conception of the general strategical situation, but he depreciated the difficulties of his adversary and exaggerated his own. He had great courage, but he was lacking in boldness and aggressiveness. Though he commanded a squadron peculiarly fitted for offensive action, he remained constantly on the defensive. Had he acted upon the principle that *the offensive alone promises decisive results* and taken the risks that the desperateness of the situation justified, he might have struck a more powerful blow for his country and won for himself a greater name."

Early in Volume II the author discusses in detail the strategical and tactical advantages of disembarkation and base of operations of the army, first, at Guantanamo Bay, thirty two nautical miles east of Santiago Bay; second, at Cabañas and Guaicabon on the west side of the entrance to Santiago harbor; and third, at Siboney and Daiquiri, as General Shafter actually did. After an exhaustive discussion, Captain Sargent believes that the latter plan was the one offering the greatest advantages to our army; but that had the Spaniards exercised wise generalship in improving

their opportunities, General Shafter would have had small chance of success. He points out that the Spaniards should have resisted the American landing at Daiquiri and Siboney with artillery, and made every effort to gain time sufficient for concentrating an overwhelming force in front of Santiago, and at the same time delaying the progress of Shafter's corps until disease had, in itself, rendered the condition of the army precarious.

Says the author:

"The sailing of this expedition to Santiago and its successful disembarkation at Daiquiri and Siboney, were in many respects remarkable events in the history of the United States. It was the first time that an expedition of this size and the second time that an expedition of this kind had ever left the American shores. Though numbering less than seventeen thousand soldiers, it contained the greater part of the regular forces of the United States. * * * Practically, this was an army of regular soldiers, commanded by regular officers. On the whole it was thoroughly drilled and highly disciplined; well fitted to win a great victory, and if need be, to endure great hardships. Among its numbers were many excellent soldiers, some old in the service, ripe with the experience of the past, yet filled with the ambition and courage of youth; others, young in years but full of promise. Some destined to fall and die, others destined to survive and conquer. Many there were, too, among the number, who after the bloody work of El Caney and San Juan, would live to carry the Stars and Stripes to victory in the far-away Philippines. Some there were who would die there, and others, who, surviving both campaigns, would live to bear the flag victoriously even unto the very gates of the Chinese capital."

LAS GUASIMAS.

Of the much discussed movement by General Wheeler which resulted in the Cavalry Division passing Lawton's division, and bringing about an engagement at Las Guasimas, the author says: "On the afternoon and night of the 23d,

General Wheeler, who commanded the dismounted cavalry division of General Shafter's army, and who was bent on getting his troops to the front as rapidly as possible, had pushed forward General Young's brigade abreast or in advance of General Lawton's division at Siboney." Later on, Captain Sargent comments on this movement as follows: "It is clear now that if General Wheeler had not pushed forward so hurriedly from Siboney, no engagement would have taken place at Las Guasimas."

In this connection, it may be of more than passing interest to military students to read what report the Swedish military attaché, Captain A. M. Th. E. Wester, General Staff, made to his government of this movement:

"The Commanding General's important decision to remain for the present on the defensive was frustrated, however, before he could embody it in the form of an order, through the inordinate self-will of one of its highest ranking officers. * * * General Wheeler on the other hand, had determined upon an attack against the Spanish position at Las Guasimas, agreeably to which he had transmitted the following report: * * * General Wheeler explained that his decision was based on the ground that it appeared to him most advantageous to attack the Spaniards before they should come under the protection of the fortifications at Santiago. This reason is hardly sustained by the existing military conditions. The real reason, without prejudice to General Wheeler's extraordinary enterprise and known courage, is undoubtedly to be found in his desire to fight the first battle on Cuban soil, and that a favorable opportunity seemed to present itself in an engagement at Las Guasimas."

The author rightly concludes that General Linares, the Spanish commander, should have fought at Las Guasimas *the decisive battle of the war*. For the position was tactically very strong; it was likewise strategically strong, interposing as it did a barrier between the American army and Santiago, and the northern army could not intercept Spanish reinforcements from Guantanamo; and lastly, Las Guasimas

was so situated that Linares could, with small effort, have concentrated there at least three-fourths of the Spanish troops in and near Santiago. If Linares had so concentrated, he would doubtless have won a decisive battle. Furthermore, every effort to delay the advance of the American forces, brought to Linares' aid the deadly Cuban fevers, which were soon to so seriously impair the fighting efficiency of the American army.

"From this discussion," says the author, "it seems clear that if the greater part of the garrisons at Guantanamo, Holguin, and Manzanillo, had been concentrated at Santiago and properly supplied with provisions, the chances of success would have been overwhelmingly in favor of the Spaniards."

In this engagement the Americans had about 964 officers and men; the Spaniards had in their three lines about 2,078 officers and men, but only 1,500 took part in the fight.

EL CANEY AND SAN JUAN.

One of the things which must have struck all officers who participated in the Santiago campaign was the reckless equanimity with which the army pushed forward without careful reconnaissance, and fought battles with the aid of imperfect maps and incomplete intelligence. The author pays a deserved tribute to General Chaffee's invaluable reconnaissance towards El Caney, and to the officers who assisted the chief engineer of the corps in this hazardous work. But unless the writer is greatly mistaken, much of the value of the intelligence service was due to the personal efforts of the late lamented Colonel Arthur L. Wagner, attached to corps headquarters.

"General Shafter made a mistake," says the author, "in fighting the battles of El Caney and San Juan Hill at the same time, for it gave the Spaniards the opportunity of massing a superior force against either part of the divided army." But all successful commanders must take some risks, and Captain Sargent finally comes to the conclusion: "Had General Shafter adopted the plan of leaving a containing

force at El Caney, Lawton's division could have marched on the evening of June 30th to the vicinity of the Ducoureau House, bivouacked there that night, and been ready early next morning to advance along the El Caney-Santiago road for an attack against San Juan Heights. Thus situated, all the divisions of the army would have been practically within supporting distance of each other; and had Lawton's attack been vigorously pressed, as it undoubtedly would have been, it is not unlikely that early in the forenoon he would have forced back the advanced line of the Spaniards, in which case San Juan Hill would have been taken in reverse."

In an over-sea expedition, there is always a tendency to cut down the tactical quota of mounted troops for reasons of economy, time and alleged difficulties of transportation and subsistence. When no other excuse is available, it is quite frequently asserted that "the terrain in the theater of operations does not lend itself to mounted work." This plea was made early in our Philippine service, but both there and in China was proven fallacious.

Referring to the use of cavalry in Cuba, Captain Sargent says:

"However, had General Shafter had two or three thousand cavalry, they could easily have prevented Escario's column from entering the city; and if Linares had attempted to concentrate at Santiago the troops which were in Santiago Province, a strong cavalry force would have been needed to prevent such a concentration. Suppose, for instance, that Linares had ordered three or four thousand troops from Guantanamo to Santiago at about the time General Shafter was considering the matter of withdrawing his lines from San Juan Heights to the high ground near El Pozo. This Spanish column, advancing along the main road that passes El Caney, would have threatened the communications of the American army, and compelled Shafter to fall back. The defeat of the column before it closed in upon him would have been an imperative necessity; and for this purpose cavalry would have been indispensable."

Why was not the American artillery more effective at El Caney and San Juan? This question seems never to have been satisfactorily answered by field artillerymen, except to say that it was not properly used. We read in Captain Sargent's work that at El Caney Capron's battery continued at intervals to bombard the enemy's position, "but the fire was not very effective." That about 2 o'clock this battery was moved forward to within about one thousand yards of the enemy's lines, where its fire became much more effective; and that "about half past 2 or 3 o'clock, the battery got the range of El Viso, shot away its flagstaff, and began to make breaches in its thick walls."

The writer cannot but ask himself the same question which came to him at El Caney: "Why was this battery not pushed up in the beginning to within less than a thousand yards of the stone fort?" If this battery had been properly used, would not El Caney have fallen by noon, and the resultant loss of life been divided by two?

Again we read that at San Juan, "the batteries of Grimes, Parkhurst, and Best, on an elevation near El Pozo, fired over the heads of the soldiers and swept the line of the enemy's trenches." While of course this artillery fire had little effect upon the Spanish trenches, why is it that the fire failed so signally to prepare the infantry attack?

These are questions which Captain Sargent leaves unanswered. We do not believe it would happen with our present splendid field artillery, but it would be of more than ordinary interest for someone to explain these things. Nine years have elapsed since these battles, and we have failed to see any satisfactory explanation in our military literature.

"Out of a total force of 18,218 men, equipped and present for duty, General Shafter concentrated at El Caney and San Juan on July 1st, 15,065 men, while General Linares, out of a total force of 13,096 soldiers and sailors at and in the vicinity of Santiago, brought on these battlefields only about 1700 men. General Shafter concentrated on the vital points eighty-six per cent. of his army. He brought there practically every available man that could be spared from other

important points in the theater of operations, leaving but 2000 or 3000 men to protect his line of communications, to guard his base of operations, and to make the attack at Aguadores. Linares concentrated on these two battlefields barely thirteen per cent. of the 13,096 soldiers and sailors which were at and in the vicinity of Santiago, and less than six per cent. of the 29,218 troops which were under his immediate command in the district. In other words, he fought the battles of July 1st with less than five per cent. of the 36,582 Spanish soldiers in Santiago Province, and with less than one per cent. of the 196,820 Spanish soldiers in the island. These figures tell the tale of the American victories."

Then came the destruction of Cervera's fleet, the capitulation of the city of Santiago, and the re-embarkation of troops for the home land.

In concluding, Captain Sargent makes a powerful plea for the upbuilding of our navy, and for a larger regular army. He points out that although it is true that at Santiago a mere handful of trained soldiers and sailors were able in a few days to bring Spain to her knees and end the war, yet it was a little short of miraculous that all this should have happened just as it did. When we consider that Shafter's little army might in all reason have been expected to meet a concentration of 25,000 or 30,000 Spanish troops upon their own ground, and that it was only poor Spanish generalship and lack of initiative which enabled us to assemble a superior force in front of Santiago, we should make a mental resolution not to try, to the breaking point, the patience of that good angel whose special province is watching over drunken men and fools!

Shall we go on tempting Providence forever? God help us if, as unprepared as we were at Santiago de Cuba, we should have to meet a first-class power. Bismarck has truly said that "God always looks after the fools and — the United States."

As good as Captain Sargent's previous military works have been, this is his masterpiece, and we venture the prediction that not only in this country, but abroad, will it receive that deserved recognition which men of all lands, whether

soldiers or laymen, are wont to bestow upon literary work which stands for truth, ability and sincerity.

The army, and especially the cavalry, is proud that it has within itself a writer so well fitted by nature, experience and study to record its deeds with gifted pen upon the undying pages of history.

CHARLES D. RHODES,

Captain Sixth Cavalry.

**Manual for the
Philippine
Constabulary.***

This handy manual was compiled by Colonel William C. Rivers, Assistant Director of Constabulary, under the direction of Brigadier General Henry T. Allen, formerly the director of constabulary. It contains laws, acts and other sources providing for the organization of the constabulary, and gives the regulations for observance by all members connected with that organization.

While the "Manual" is of greatest use to the constabulary, whose officers cannot get along without it, it is of great value to all officers of the army serving in the Philippines, and contains a great deal of interest to the civilians who desire knowledge of the organization and duties of this efficient body of native police, to whom is charged the policing of the greater part of the islands.

The appendix contains certain acts of the Philippine Commission, the most important of which are No. 175, "Providing for the organization and government of the Insular Constabulary, and for the inspection of the municipal police;" No. 292, "Defining treason, insurrection, etc., and providing for punishment thereof;" No. 518, "Defining brigandage and providing for its punishment."

President McKinley's instructions to the Philippine Commission, 1900, are given in full.

The metric system of weights and measures, in force in the islands, is also given, and a convenient table showing

*"MANUAL FOR THE PHILIPPINE CONSTABULARY." By Colonel William C. Rivers, Assistant Director Philippine Constabulary. Bureau of Printing, Manila, P. I. Price, 1.75 pesos, net.

the conversion of the metric system into English units is shown.

A very complete index is found at the end of this very neat little book.

**The Cavalry
in the
Russo-Japanese
War.***

A copy of this book was received for review after the translation that appears in this number of the CAVALRY JOURNAL had been made for the Staff College and was partly in print. As our translation gives the book in full and our readers will have an opportunity to judge of its merits themselves, an extended notice of it here is unnecessary.

**Manual of
Military Field
Engineering.†**

The ninth edition of this military Trautwine has just appeared. This valuable work is too well known to our officers to need any lengthy review. The idea of bringing out the new edition was to render the book up to date in view of all changes in the subjects treated that seem to follow from the Russo-Japanese War. As the author states in his preface the main point of this matter, we can do no better than quote his views:

"Experiences gleaned from that conflict render it certain that troops subjected to shrapnel fire of well-trained batteries *must* intrench or suffer enormous losses, and, in order to have trenches for both cover and fire effective, opportunity must be afforded the occupants when not firing to sit with their backs and heads close against the front wall of the trench. Profiles of shelter trenches have therefore been changed to meet this requirement."

*"THE CAVALRY IN THE RUSSO-JAPANESE WAR." By Count Gustav Wrangel, Captain Austrian cavalry. Translated by Lieutenant Montgomery Hugh Rees, London. Price, 3s. 6d., net.

†"MANUAL OF FIELD ENGINEERING." By Captain Wm. D. Beach, Third Cavalry. Franklin Hudson, Kansas City, Mo. Price, \$1.75.

Many new plates have been introduced and quite a lot of new and up-to-date material added, but not in any such amount as to take away from the commendable brevity of this work. We believe a little more information as to the present system of handling field communications would have been a valuable feature. For we dare say that the present edition, even though just from the press, will be obsolete as far as field telephones and telegraphs are concerned. We are strongly in doubt if the army will be much longer encumbered with the lances and wagons for carrying them, and we are sure the next war will see only the insulated wire as far as hasty work in the field is concerned. When the field wire is to be supplanted by a more durable one it will be done, not by the combatant force, but by those who have more time and who are less valuable to the nation than the armed contingent. We think that a fuller explanation of the methods of communications, even though somewhat beyond the true object of the work, would have been exceedingly wise. X. Y. Z.

**Ordnance and
Gunnery.***

The courses of instruction at the Military Academy cover such a broad field and the time devoted to each subject is so limited that it is necessary to have especially prepared text-books for many of the departments. Particularly is this true of the Department of Ordnance and Gunnery, where the branches of this subject are so many that no one book can be found, even if up-to-date, that covers the ground and, furthermore, the numerous changes continually being made in the materials of war necessitates frequent revisions, either by pamphlets or new editions of the text-book being used by that department.

This is a new book that covers the subjects taught under this head thoroughly and as completely as the time allowed for this instruction at the Military Academy will permit.

* "ORDNANCE AND GUNNERY." A text-book prepared for the Cadets of the U. S. Military Academy at West Point. By Lieutenant Colonel Ormond M. Lissak, Professor of Ordnance and Gunnery at the U. S. Military Academy. John Wiley & Sons, New York. Price, \$6.00.

The author's reputation as an instructor and student is a guarantee of its accuracy.

The book has over 600 pages of text and tables, and is well illustrated by over 300 figures and half-tone plates. The seventeen chapters of the work cover the following subjects: Gunpowders; measurement of velocities and pressure; interior ballistics; explosives; metals used in ordnance construction; guns; recoil and recoil brakes; artillery of the United States land service; exterior ballistics; projectiles; armor; primers and fuses for cannon; sights; range and position finding; small arms and their ammunition; machine guns and submarine mines and torpedoes and torpedo boats.

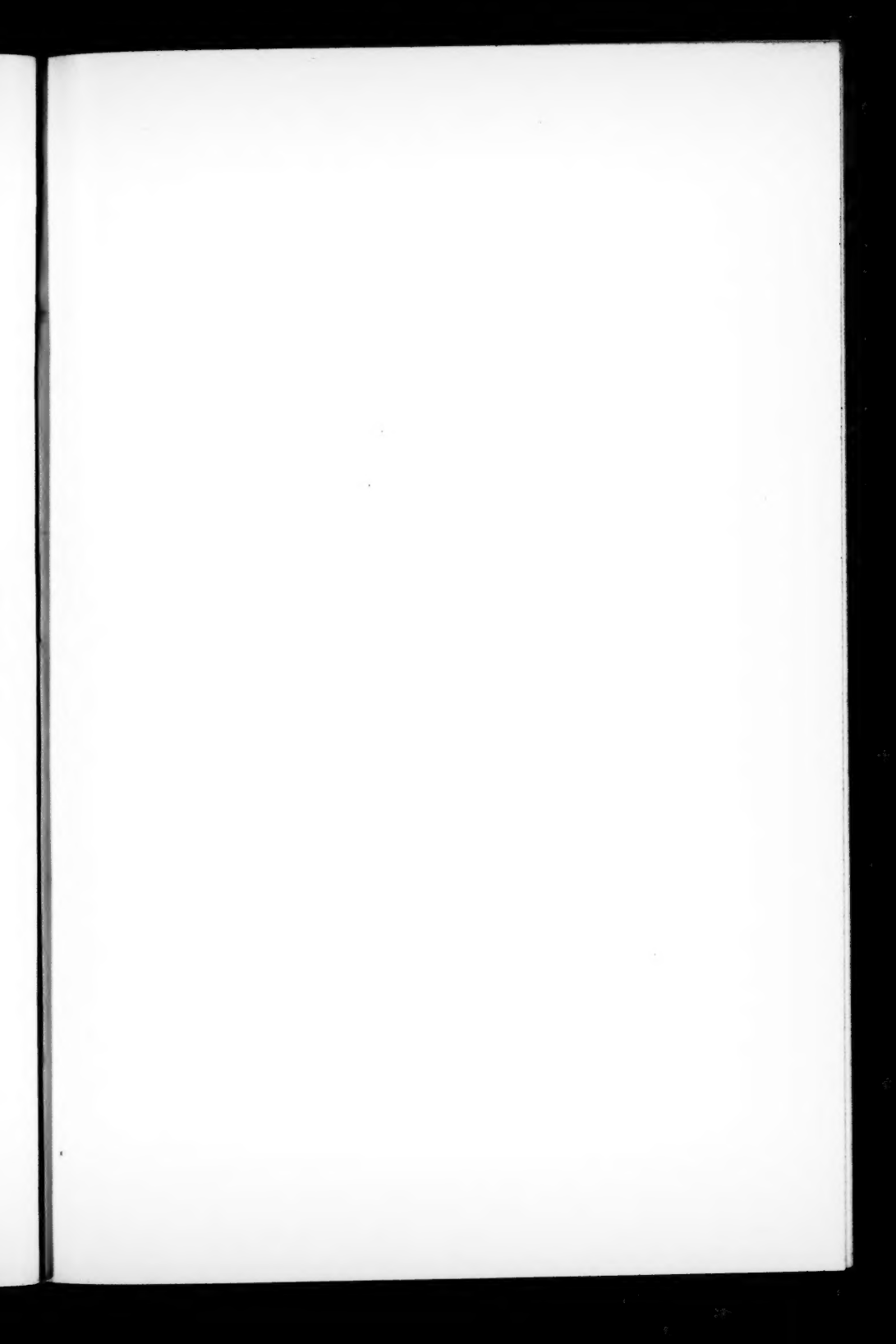
BOOKS RECEIVED FOR REVIEW.

"War and the World's Life." By Colonel F. N. Maude, C. B. Smith, Elder & Co., London.

"Great Captains—Napoleon." Volumes III and IV. By Theodore Ayrault Dodge, Brevet Lieutenant Colonel U. S. Army, retired. Houghton, Mifflin & Co., Boston.

"The Signaler's Pocket Book." By G. W. Browne, Twentieth Hussars. Gale, Polden & Co., London.







BRIGADIER GENERAL JAMES H. WILSON,
UNITED STATES ARMY.

Major General U. S. Volunteers 1865-6 and 1898.

